



## Multi-Purpose Putty

### J-B Weld Company LLC

Version No: 2.9  
Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

Issue Date: 05/09/2023  
Print Date: 05/23/2023  
S.GHS.USA.EN

#### SECTION 1 Identification

##### Product Identifier

|                               |                     |
|-------------------------------|---------------------|
| Product name                  | Multi-Purpose Putty |
| Chemical Name                 | Not Applicable      |
| Synonyms                      | 40052, 40054        |
| Proper shipping name          | Polyester resin kit |
| Chemical formula              | Not Applicable      |
| Other means of identification | Not Available       |

##### Recommended use of the chemical and restrictions on use

|                          |                                             |
|--------------------------|---------------------------------------------|
| Relevant identified uses | Use according to manufacturer's directions. |
|--------------------------|---------------------------------------------|

##### Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

|                         |                                                      |                                                      |
|-------------------------|------------------------------------------------------|------------------------------------------------------|
| Registered company name | J-B Weld Company LLC                                 | J-B Weld Company, LLC                                |
| Address                 | 400 CMH Road TX 75482 United States                  | 400 CMH Road Sulphur Springs, TX 75482 United States |
| Telephone               | 903-885-7696                                         | 903-885-7696                                         |
| Fax                     | Not Available                                        | Not Available                                        |
| Website                 | <a href="http://www.JBWeld.com">www.JBWeld.com</a>   | <a href="http://www.JBWeld.com">www.JBWeld.com</a>   |
| Email                   | <a href="mailto:info@JBWeld.com">info@JBWeld.com</a> | <a href="mailto:info@jbweld.com">info@jbweld.com</a> |

##### Emergency phone number

|                                   |                                                                     |                                                      |
|-----------------------------------|---------------------------------------------------------------------|------------------------------------------------------|
| Association / Organisation        | InfoTrac                                                            | InfoTrac                                             |
| Emergency telephone numbers       | Transportation Emergencies: 800-535-5053 or (24 hours)              | Transportation Emergencies 01-800-681-1530 (24 hour) |
| Other emergency telephone numbers | Poison Control Centers: Medical Emergencies 800-222-1222 (24 hours) | Not Available                                        |

#### SECTION 2 Hazard(s) identification

##### Classification of the substance or mixture

NFPA 704 diamond



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

|                |                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Classification | Flammable Liquids Category 3, Specific Target Organ Toxicity - Single Exposure Category 1, Acute Toxicity (Inhalation) Category 4, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, Acute Toxicity (Oral) Category 4, Reproductive Toxicity Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 1, Carcinogenicity Category 2 |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

##### Label elements

|                     |        |
|---------------------|--------|
| Hazard pictogram(s) |        |
| Signal word         | Danger |

##### Hazard statement(s)

## Multi-Purpose Putty

|      |                                                                                                   |
|------|---------------------------------------------------------------------------------------------------|
| H226 | Flammable liquid and vapour.                                                                      |
| H370 | Causes damage to organs. (Respiratory system) (Inhalation)                                        |
| H332 | Harmful if inhaled.                                                                               |
| H335 | May cause respiratory irritation.                                                                 |
| H302 | Harmful if swallowed.                                                                             |
| H361 | Suspected of damaging fertility or the unborn child.                                              |
| H372 | Causes damage to organs through prolonged or repeated exposure. (Respiratory system) (Inhalation) |
| H351 | Suspected of causing cancer.                                                                      |

## Hazard(s) not otherwise classified

Not Applicable

## Precautionary statement(s) Prevention

|      |                                                                                                |
|------|------------------------------------------------------------------------------------------------|
| P201 | Obtain special instructions before use.                                                        |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P233 | Keep container tightly closed.                                                                 |
| P260 | Do not breathe dust/fume.                                                                      |
| P271 | Use in a well-ventilated area.                                                                 |
| P280 | Wear protective gloves and protective clothing.                                                |
| P240 | Ground/bond container and receiving equipment.                                                 |
| P241 | Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment.              |
| P242 | Use only non-sparking tools.                                                                   |
| P243 | Take precautionary measures against static discharge.                                          |
| P270 | Do not eat, drink or smoke when using this product.                                            |
| P261 | Avoid breathing dust/fumes.                                                                    |
| P202 | Do not handle until all safety precautions have been read and understood.                      |
| P264 | Wash all exposed external body areas thoroughly after handling.                                |

## Precautionary statement(s) Response

|                |                                                                                                     |
|----------------|-----------------------------------------------------------------------------------------------------|
| P308+P311      | IF exposed: Call a POISON CENTER or doctor/physician.                                               |
| P308+P313      | IF exposed or concerned: Get medical advice/ attention.                                             |
| P370+P378      | In case of fire: Use alcohol resistant foam or fine spray/water fog to extinguish.                  |
| P312           | Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.                               |
| P314           | Get medical advice/attention if you feel unwell.                                                    |
| P301+P312      | IF SWALLOWED: Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.                 |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                          |
| P330           | Rinse mouth.                                                                                        |

## Precautionary statement(s) Storage

|           |                                                                  |
|-----------|------------------------------------------------------------------|
| P403+P235 | Store in a well-ventilated place. Keep cool.                     |
| P405      | Store locked up.                                                 |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |

## Precautionary statement(s) Disposal

|      |                                                                                                                                  |
|------|----------------------------------------------------------------------------------------------------------------------------------|
| P501 | Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation. |
|------|----------------------------------------------------------------------------------------------------------------------------------|

## SECTION 3 Composition / information on ingredients

## Substances

See section below for composition of Mixtures

## Mixtures

| CAS No        | %[weight] | Name                                                              |
|---------------|-----------|-------------------------------------------------------------------|
| 113669-95-7   | 30-40     | <u>castor oil acids, oxidised residues/butylene glycol esters</u> |
| 1317-65-3*    | 30-40     | <u>Limestone</u>                                                  |
| 14807-96-6*   | 16-30     | <u>Talc</u>                                                       |
| 100-42-5      | 1-3       | <u>styrene</u>                                                    |
| 50815-87-7    | 5-10      | <u>sodium borosilicate</u>                                        |
| 112926-00-8   | 1-5       | <u>silica amorphous</u>                                           |
| Not Available | 0.1-1     | N,N-dimethylaniline                                               |
| 1302-78-9     | 0.1-1     | <u>bentonite</u>                                                  |

Continued...

## Multi-Purpose Putty

| CAS No      | %[weight] | Name                                             |
|-------------|-----------|--------------------------------------------------|
| 546-93-0*   | 0.1-1     | <u>Magnesite</u>                                 |
| 16389-88-1* | 0.1-1     | <u>Dolomite</u>                                  |
| 1318-59-8*  | 0.1-1     | <u>Chlorite</u>                                  |
| 131459-42-2 | 0.01-0.1  | <u>alkenes, C24-54alpha, branched and linear</u> |
| 14808-60-7  | 0.01-0.1  | <u>silica crystalline - quartz</u>               |
| 77-99-6     | 0.01-0.1  | <u>trimethylolpropane</u>                        |

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

## SECTION 4 First-aid measures

## Description of first aid measures

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye Contact</b>  | <p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> <li>Wash out immediately with fresh running water.</li> <li>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Skin Contact</b> | <p>If skin or hair contact occurs:</p> <ul style="list-style-type: none"> <li>Immediately flush body and clothes with large amounts of water, using safety shower if available.</li> <li>Quickly remove all contaminated clothing, including footwear.</li> <li>Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.</li> <li>Transport to hospital, or doctor.</li> </ul> <p>For thermal burns:</p> <ul style="list-style-type: none"> <li>Decontaminate area around burn.</li> <li>Consider the use of cold packs and topical antibiotics.</li> </ul> <p>For first-degree burns (affecting top layer of skin)</p> <ul style="list-style-type: none"> <li>Hold burned skin under cool (not cold) running water or immerse in cool water until pain subsides.</li> <li>Use compresses if running water is not available.</li> <li>Cover with sterile non-adhesive bandage or clean cloth.</li> <li>Do NOT apply butter or ointments; this may cause infection.</li> <li>Give over-the counter pain relievers if pain increases or swelling, redness, fever occur.</li> </ul> <p>For second-degree burns (affecting top two layers of skin)</p> <ul style="list-style-type: none"> <li>Cool the burn by immerse in cold running water for 10-15 minutes.</li> <li>Use compresses if running water is not available.</li> <li>Do NOT apply ice as this may lower body temperature and cause further damage.</li> <li>Do NOT break blisters or apply butter or ointments; this may cause infection.</li> <li>Protect burn by cover loosely with sterile, nonstick bandage and secure in place with gauze or tape.</li> </ul> <p>To prevent shock: (unless the person has a head, neck, or leg injury, or it would cause discomfort):</p> <ul style="list-style-type: none"> <li>Lay the person flat.</li> <li>Elevate feet about 12 inches.</li> <li>Elevate burn area above heart level, if possible.</li> <li>Cover the person with coat or blanket.</li> <li>Seek medical assistance.</li> </ul> <p>For third-degree burns</p> <p>Seek immediate medical or emergency assistance.</p> <p>In the mean time:</p> <ul style="list-style-type: none"> <li>Protect burn area cover loosely with sterile, nonstick bandage or, for large areas, a sheet or other material that will not leave lint in wound.</li> <li>Separate burned toes and fingers with dry, sterile dressings.</li> <li>Do not soak burn in water or apply ointments or butter; this may cause infection.</li> <li>To prevent shock see above.</li> <li>For an airway burn, do not place pillow under the person's head when the person is lying down. This can close the airway.</li> <li>Have a person with a facial burn sit up.</li> <li>Check pulse and breathing to monitor for shock until emergency help arrives.</li> </ul> |
| <b>Inhalation</b>   | <ul style="list-style-type: none"> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>Transport to hospital, or doctor, without delay.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Ingestion</b>    | <ul style="list-style-type: none"> <li>Immediately give a glass of water.</li> <li>First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## Most important symptoms and effects, both acute and delayed

See Section 11

## Indication of any immediate medical attention and special treatment needed

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

- Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 50 mm Hg) should be intubated.
- Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]

Treat symptomatically.

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## SECTION 5 Fire-fighting measures

## Extinguishing media

For **SMALL FIRES**:Dry chemical, CO<sub>2</sub>, water spray or foam.For **LARGE FIRES**:

Water-spray, fog or foam.

## Special hazards arising from the substrate or mixture

|                      |                                                                                                                                          |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Fire Incompatibility | ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------|

## Special protective equipment and precautions for fire-fighters

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fire Fighting         | <ul style="list-style-type: none"><li>▶ When silica dust is dispersed in air, firefighters should wear inhalation protection as hazardous substances from the fire may be adsorbed on the silica particles.</li><li>▶ When heated to extreme temperatures, (&gt;1700 deg.C) amorphous silica can fuse.</li><li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li><li>▶ Wear breathing apparatus plus protective gloves.</li></ul>                                                                                                                                                                                                                                                                                                                                          |
| Fire/Explosion Hazard | <ul style="list-style-type: none"><li>▶ When silica dust is dispersed in air, firefighters should wear inhalation protection as hazardous substances from the fire may be adsorbed on the silica particles.</li><li>▶ When heated to extreme temperatures, (&gt;1700 deg.C) amorphous silica can fuse.</li><li>▶ Flammable solid which burns and propagates flame easily, even when partly wetted with water.</li><li>▶ Any source of ignition, i.e. friction, heat, sparks or flame, may cause fire or explosion.</li></ul> Combustion products include: <ul style="list-style-type: none"><li>‘ carbon monoxide (CO)</li><li>‘ carbon dioxide (CO<sub>2</sub>)</li><li>‘ silicon dioxide (SiO<sub>2</sub>)</li><li>‘ other pyrolysis products typical of burning organic material.</li></ul> |

## SECTION 6 Accidental release measures

## Personal precautions, protective equipment and emergency procedures

See section 8

## Environmental precautions

See section 12

## Methods and material for containment and cleaning up

|              |                                                                                                                                                                      |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minor Spills | <ul style="list-style-type: none"><li>▶ Remove all ignition sources.</li><li>▶ <b>DO NOT touch or walk through spilled material.</b></li></ul>                       |
| Major Spills | <ul style="list-style-type: none"><li>▶ Clear area of personnel and move upwind.</li><li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li></ul> |

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## SECTION 7 Handling and storage

## Precautions for safe handling

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safe handling     | <ul style="list-style-type: none"><li>▶ Avoid all personal contact, including inhalation.</li><li>▶ Wear protective clothing when risk of overexposure occurs.</li><li>▶ Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions)</li><li>▶ Minimise airborne dust and eliminate all ignition sources. Keep away from heat, hot surfaces, sparks, and flame.</li></ul> |
| Other information | <b>FOR MINOR QUANTITIES:</b> <ul style="list-style-type: none"><li>▶ Store in an indoor fireproof cabinet or in a room of noncombustible construction.</li><li>▶ Provide adequate portable fire-extinguishers in or near the storage area.</li></ul>                                                                                                                                                                                                                                                                                                                                      |

## Conditions for safe storage, including any incompatibilities

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Suitable container      | For low viscosity materials and solids:<br>Drums and jerricans must be of the non-removable head type.<br>Where a can is to be used as an inner package, the can must have a screwed enclosure.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Storage incompatibility | For alkyl aromatics:<br>The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. The most common and dominant one is the attack by oxidation at benzylic carbon as the intermediate formed is stabilised by resonance structure of the ring. <ul style="list-style-type: none"><li>▶ Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents.</li><li>▶ Aromatics can react exothermically with bases and with diazo compounds.</li></ul> The substance may be or contains a "metalloid"<br>The following elements are considered to be metalloids; boron, silicon, germanium, arsenic, antimony, tellurium and (possibly) polonium<br>The electronegativities and ionisation energies of the metalloids are between those of the metals and nonmetals, so the metalloids exhibit characteristics of both classes. The reactivity of the metalloids depends on the element with which they are reacting.<br>Silicas: <ul style="list-style-type: none"><li>▶ react with hydrofluoric acid to produce silicon tetrafluoride gas</li><li>▶ react with xenon hexafluoride to produce explosive xenon trioxide</li><li>▶ reacts exothermically with oxygen difluoride, and explosively with chlorine trifluoride (these halogenated materials are not commonplace</li></ul> |

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- industrial materials) and other fluorine-containing compounds
- ▶ may react with fluorine, chlorates
  - ▶ are incompatible with strong oxidisers, manganese trioxide, chlorine trioxide, strong alkalis, metal oxides, concentrated orthophosphoric acid, vinyl acetate
  - ▶ may react vigorously when heated with alkali carbonates.
  - ▶ Avoid strong acids, bases.
- Styrene:
- ▶ requires inhibition with adequate levels of substituted phenol (such as tert-butylcatechol to prevent polymerisation - material that has had inhibitor removed, e.g. is uninhibited, must be refrigerated and used within 24 hours, i.e. not stored; contact with alkali solutions or glycols will remove inhibitor and render material unstable on storage
  - ▶ polymerisation may cause container to explode
  - ▶ polymerisation may be caused by elevated temperatures (above 66 deg C.), butyl lithium, peroxides, UV light, or sunlight
  - ▶ reacts violently with chlorosulfonic acid, strong oxidisers, sulfuric acid, xenon tetrafluoride
  - ▶ is incompatible with acids, rust, catalysts for vinyl polymerisation, 2,5-dimethyl-2,5-di(tert-butylperoxy)hexane, peroxides, metals salts (e.g., aluminium chloride, copper chlorate, manganese nitrate, etc.)
  - ▶ corrodes copper and its alloys
  - ▶ attacks some plastics, rubber or coatings
  - ▶ flow or agitation may generate electrostatic charges due to low conductivity
  - ▶ uninhibited monomer vapour may block vents and confined spaces by forming solid polymer

## SECTION 8 Exposure controls / personal protection

## Control parameters

## Occupational Exposure Limits (OEL)

## INGREDIENT DATA

| Source                                               | Ingredient          | Material name                                                               | TWA                 | STEL                | Peak                        | Notes              |
|------------------------------------------------------|---------------------|-----------------------------------------------------------------------------|---------------------|---------------------|-----------------------------|--------------------|
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Limestone           | Calcium Carbonate- Respirable fraction                                      | 5 mg/m3             | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Limestone           | Limestone- Respirable fraction                                              | 5 mg/m3             | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Limestone           | Marble- Respirable fraction                                                 | 5 mg/m3             | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Limestone           | Marble- Total dust                                                          | 15 mg/m3            | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Limestone           | Calcium Carbonate- Total dust                                               | 15 mg/m3            | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Limestone           | Limestone- Total dust                                                       | 15 mg/m3            | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | Limestone           | Inert or Nuisance Dust: Total Dust                                          | 15 mg/m3 / 50 mppcf | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | Limestone           | Inert or Nuisance Dust: Respirable fraction                                 | 5 mg/m3 / 15 mppcf  | Not Available       | Not Available               | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | Limestone           | Marble - total                                                              | 10 mg/m3            | Not Available       | Not Available               | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | Limestone           | Calcium carbonate - total                                                   | 10 mg/m3            | Not Available       | Not Available               | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | Limestone           | Limestone - respirable                                                      | 5 mg/m3             | Not Available       | Not Available               | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | Limestone           | Marble - respirable                                                         | 5 mg/m3             | Not Available       | Not Available               | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | Limestone           | Calcium carbonate - respirable                                              | 5 mg/m3             | Not Available       | Not Available               | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | Limestone           | Limestone - total                                                           | 10 mg/m3            | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Talc                | Particulates Not Otherwise Regulated (PNOR)- Respirable fraction            | 5 mg/m3             | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Talc                | Particulates Not Otherwise Regulated (PNOR)- Total dust                     | 15 mg/m3            | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | Talc                | Silicates (less than 1% crystalline silica): Soapstone                      | 20 mppcf            | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | Talc                | Silicates (less than 1% crystalline silica): Talc (not containing asbestos) | 20 mppcf            | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | Talc                | Silicates (less than 1% crystalline silica): Talc (containing asbestos)     | Not Available       | Not Available       | Not Available               | Use asbestos limit |
| US NIOSH Recommended Exposure Limits (RELs)          | Talc                | Talc (containing no asbestos and less than 1% quartz) - respirable          | 2 mg/m3             | Not Available       | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-2 | styrene             | Styrene                                                                     | 100 ppm             | 200 ppm             | 600 (5 min in any 3 hr) ppm | (Z37.15-1969)      |
| US NIOSH Recommended Exposure Limits (RELs)          | styrene             | Styrene                                                                     | 50 ppm / 215 mg/m3  | 425 mg/m3 / 100 ppm | Not Available               | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | sodium borosilicate | Particulates Not Otherwise Regulated (PNOR)- Total dust                     | 15 mg/m3            | Not Available       | Not Available               | Not Available      |

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| Source                                               | Ingredient                                | Material name                                                    | TWA                                      | STEL          | Peak          | Notes              |
|------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------|------------------------------------------|---------------|---------------|--------------------|
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | sodium borosilicate                       | Particulates Not Otherwise Regulated (PNOR)- Respirable fraction | 5 mg/m3                                  | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | sodium borosilicate                       | Inert or Nuisance Dust: Total Dust                               | 15 mg/m3 / 50 mppcf                      | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | sodium borosilicate                       | Inert or Nuisance Dust: Respirable fraction                      | 5 mg/m3 / 15 mppcf                       | Not Available | Not Available | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | sodium borosilicate                       | Particulates not otherwise regulated                             | Not Available                            | Not Available | Not Available | See Appendix D     |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | silica amorphous                          | Particulates Not Otherwise Regulated (PNOR)- Total dust          | 15 mg/m3                                 | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | silica amorphous                          | Particulates Not Otherwise Regulated (PNOR)- Respirable fraction | 5 mg/m3                                  | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | silica amorphous                          | Amorphous, including natural diatomaceous earth                  | 80 (%SiO2) mg/m3 / 20 mppcf              | Not Available | Not Available | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | silica amorphous                          | Silica, amorphous                                                | 6 mg/m3                                  | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | bentonite                                 | Particulates Not Otherwise Regulated (PNOR)- Respirable fraction | 5 mg/m3                                  | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | bentonite                                 | Particulates Not Otherwise Regulated (PNOR)- Total dust          | 15 mg/m3                                 | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | bentonite                                 | Inert or Nuisance Dust: Total Dust                               | 15 mg/m3 / 50 mppcf                      | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | bentonite                                 | Inert or Nuisance Dust: Respirable fraction                      | 5 mg/m3 / 15 mppcf                       | Not Available | Not Available | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | bentonite                                 | Particulates not otherwise regulated                             | Not Available                            | Not Available | Not Available | See Appendix D     |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Magnesite                                 | Magnesite- Respirable fraction                                   | 5 mg/m3                                  | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Magnesite                                 | Magnesite- Total dust                                            | 15 mg/m3                                 | Not Available | Not Available | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | Magnesite                                 | Magnesite - respirable                                           | 5 mg/m3                                  | Not Available | Not Available | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | Magnesite                                 | Magnesite - total                                                | 10 mg/m3                                 | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Chlorite                                  | Particulates Not Otherwise Regulated (PNOR)- Total dust          | 15 mg/m3                                 | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | Chlorite                                  | Particulates Not Otherwise Regulated (PNOR)- Respirable fraction | 5 mg/m3                                  | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | Chlorite                                  | Inert or Nuisance Dust: Respirable fraction                      | 5 mg/m3 / 15 mppcf                       | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | Chlorite                                  | Inert or Nuisance Dust: Total Dust                               | 15 mg/m3 / 50 mppcf                      | Not Available | Not Available | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | Chlorite                                  | Particulates not otherwise regulated                             | Not Available                            | Not Available | Not Available | See Appendix D     |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | alkenes, C24-54alpha, branched and linear | Particulates Not Otherwise Regulated (PNOR)- Total dust          | 15 mg/m3                                 | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | alkenes, C24-54alpha, branched and linear | Particulates Not Otherwise Regulated (PNOR)- Respirable fraction | 5 mg/m3                                  | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | alkenes, C24-54alpha, branched and linear | Inert or Nuisance Dust: Total Dust                               | 15 mg/m3 / 50 mppcf                      | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | alkenes, C24-54alpha, branched and linear | Inert or Nuisance Dust: Respirable fraction                      | 5 mg/m3 / 15 mppcf                       | Not Available | Not Available | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | alkenes, C24-54alpha, branched and linear | Particulates not otherwise regulated                             | Not Available                            | Not Available | Not Available | See Appendix D     |
| US OSHA Permissible Exposure Limits (PELs) Table Z-1 | silica crystalline - quartz               | Quartz - respirable                                              | 0.05 mg/m3                               | Not Available | Not Available | Not Available      |
| US OSHA Permissible Exposure Limits (PELs) Table Z-3 | silica crystalline - quartz               | Silica: Crystalline: Quartz (Respirable)                         | 10 (%SiO2+2) mg/m3 / 250 (%SiO2+5) mppcf | Not Available | Not Available | Not Available      |
| US NIOSH Recommended Exposure Limits (RELs)          | silica crystalline - quartz               | Silica, crystalline (as respirable dust)                         | 0.05 mg/m3                               | Not Available | Not Available | Ca; See Appendix A |

| Emergency Limits |               |               |               |
|------------------|---------------|---------------|---------------|
| Ingredient       | TEEL-1        | TEEL-2        | TEEL-3        |
| styrene          | Not Available | Not Available | Not Available |
| silica amorphous | 18 mg/m3      | 200 mg/m3     | 1,200 mg/m3   |

Multi-Purpose Putty

| Ingredient                  | TEEL-1      | TEEL-2      | TEEL-3      |
|-----------------------------|-------------|-------------|-------------|
| silica amorphous            | 18 mg/m3    | 100 mg/m3   | 630 mg/m3   |
| silica amorphous            | 120 mg/m3   | 1,300 mg/m3 | 7,900 mg/m3 |
| silica amorphous            | 45 mg/m3    | 500 mg/m3   | 3,000 mg/m3 |
| silica amorphous            | 18 mg/m3    | 740 mg/m3   | 4,500 mg/m3 |
| Magnesite                   | 45 mg/m3    | 260 mg/m3   | 1,600 mg/m3 |
| silica crystalline - quartz | 0.075 mg/m3 | 33 mg/m3    | 200 mg/m3   |

| Ingredient                                                 | Original IDLH       | Revised IDLH  |
|------------------------------------------------------------|---------------------|---------------|
| castor oil acids, oxidised residues/butylene glycol esters | Not Available       | Not Available |
| Limestone                                                  | Not Available       | Not Available |
| Talc                                                       | 1,000 mg/m3         | Not Available |
| styrene                                                    | 700 ppm             | Not Available |
| sodium borosilicate                                        | Not Available       | Not Available |
| silica amorphous                                           | 3,000 mg/m3         | Not Available |
| bentonite                                                  | Not Available       | Not Available |
| Magnesite                                                  | Not Available       | Not Available |
| Dolomite                                                   | Not Available       | Not Available |
| Chlorite                                                   | Not Available       | Not Available |
| alkenes, C24-54alpha, branched and linear                  | Not Available       | Not Available |
| silica crystalline - quartz                                | 25 mg/m3 / 50 mg/m3 | Not Available |
| trimethylolpropane                                         | Not Available       | Not Available |

Occupational Exposure Banding

| Ingredient         | Occupational Exposure Band Rating                                                                                                                                                                                                                                                                                                                                  | Occupational Exposure Band Limit |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| trimethylolpropane | E                                                                                                                                                                                                                                                                                                                                                                  | ≤ 0.01 mg/m³                     |
| Notes:             | Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health. |                                  |

Exposure controls

|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appropriate engineering controls                                      | For large scale or continuous use: <ul style="list-style-type: none"><li>▶ Spark-free, earthed ventilation system, venting directly to the outside and separate from usual ventilation systems</li><li>▶ Provide dust collectors with explosion vents</li></ul> Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. |
| Individual protection measures, such as personal protective equipment |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Eye and face protection                                               | <ul style="list-style-type: none"><li>▶ Safety glasses with side shields.</li><li>▶ Chemical goggles.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Skin protection                                                       | See Hand protection below                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Hands/feet protection                                                 | The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. <ul style="list-style-type: none"><li>▶ Wear physical protective gloves, e.g. leather.</li><li>▶ Wear safety footwear.</li></ul>                                                                      |
| Body protection                                                       | See Other protection below                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Other protection                                                      | <ul style="list-style-type: none"><li>▶ Overalls.</li><li>▶ Eyewash unit.</li><li>▶ Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.</li><li>▶ For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).</li></ul>                                                                                                                                                                                    |

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

- Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).
- Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.
- Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
- Use approved positive flow mask if significant quantities of dust becomes airborne.
- Try to avoid creating dust conditions.

## Multi-Purpose Putty

Class P2 particulate filters are used for protection against mechanically and thermally generated particulates or both.

P2 is a respiratory filter rating under various international standards, Filters at least 94% of airborne particles

Suitable for:

- Relatively small particles generated by mechanical processes eg. grinding, cutting, sanding, drilling, sawing.
- Sub-micron thermally generated particles e.g. welding fumes, fertilizer and bushfire smoke.
- Biologically active airborne particles under specified infection control applications e.g. viruses, bacteria, COVID-19, SARS

## SECTION 9 Physical and chemical properties

## Information on basic physical and chemical properties

|                                              |                    |                                         |                |
|----------------------------------------------|--------------------|-----------------------------------------|----------------|
| Appearance                                   | Grey/white         |                                         |                |
| Physical state                               | Thixotropic paste. | Relative density (Water = 1)            | 1.76           |
| Odour                                        | Pungent            | Partition coefficient n-octanol / water | Not Available  |
| Odour threshold                              | Not Available      | Auto-ignition temperature (°C)          | Not Available  |
| pH (as supplied)                             | Not Available      | Decomposition temperature (°C)          | Not Available  |
| Melting point / freezing point (°C)          | Not Available      | Viscosity (cSt)                         | Not Available  |
| Initial boiling point and boiling range (°C) | 145                | Molecular weight (g/mol)                | Not Available  |
| Flash point (°C)                             | 32                 | Taste                                   | Not Available  |
| Evaporation rate                             | Not Available      | Explosive properties                    | Not Available  |
| Flammability                                 | Flammable.         | Oxidising properties                    | Not Available  |
| Upper Explosive Limit (%)                    | Not Available      | Surface Tension (dyn/cm or mN/m)        | Not Applicable |
| Lower Explosive Limit (%)                    | Not Available      | Volatile Component (%vol)               | Not Available  |
| Vapour pressure (kPa)                        | Not Available      | Gas group                               | Not Available  |
| Solubility in water                          | Immiscible         | pH as a solution (1%)                   | Not Available  |
| Vapour density (Air = 1)                     | Not Available      | VOC g/L                                 | 188.6          |

## SECTION 10 Stability and reactivity

|                                    |                                                                                                                                                  |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                         | See section 7                                                                                                                                    |
| Chemical stability                 | <ul style="list-style-type: none"> <li>▶ Unstable in the presence of incompatible materials.</li> <li>▶ Product is considered stable.</li> </ul> |
| Possibility of hazardous reactions | See section 7                                                                                                                                    |
| Conditions to avoid                | See section 7                                                                                                                                    |
| Incompatible materials             | See section 7                                                                                                                                    |
| Hazardous decomposition products   | See section 5                                                                                                                                    |

## SECTION 11 Toxicological information

## Information on toxicological effects

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhaled      | <p>There is strong evidence to suggest that this material can cause, if inhaled once, very serious, irreversible damage of organs. The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.</p> <p>If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures. Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.</p> <p>The acute toxicity of inhaled alkylbenzene is best described by central nervous system depression. These compounds may also act as general anaesthetics.</p> |
| Ingestion    | <p>There is strong evidence to suggest that this material can cause, if swallowed once, very serious, irreversible damage of organs. The material has <b>NOT</b> been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Skin Contact | <p>There is strong evidence to suggest that this material, on a single contact with skin, can cause very serious, irreversible damage of organs. Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.</p> <p>There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. Open cuts, abraded or irritated skin should not be exposed to this material.</p> <p>Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.</p>                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Eye          | This material can cause eye irritation and damage in some persons.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Chronic      | <p>There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

Continued...

## Multi-Purpose Putty

|                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                      |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|                                                            | <p>Based on experience with animal studies, exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother.</p> <p>Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. Amorphous silicas generally are less hazardous than crystalline silicas, but the former can be converted to the latter on heating and subsequent cooling. Inhalation of dusts containing crystalline silicas may lead to silicosis, a disabling lung disease that may take years to develop. Soluble silicates do not exhibit sensitizing potential. Testing in bacterial and animal experiments have not shown any evidence of them causing mutations or birth defects.</p> <p>Exposure to styrene may aggravate central nervous system disorders, chronic respiratory disease, skin disease, kidney disease and liver disease. Exposure to styrene at work causes effects on the nervous system.</p> |                                                                                      |
| Multi-Purpose Putty                                        | <b>TOXICITY</b><br>Not Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>IRRITATION</b><br>Not Available                                                   |
| castor oil acids, oxidised residues/butylene glycol esters | <b>TOXICITY</b><br>Not Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>IRRITATION</b><br>Not Available                                                   |
| Limestone                                                  | <b>TOXICITY</b><br>Oral (Rat) LD50: 6450 mg/kg <sup>[2]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>IRRITATION</b><br>Not Available                                                   |
| Talc                                                       | <b>TOXICITY</b><br>dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>IRRITATION</b><br>Eye: no adverse effect observed (not irritating) <sup>[1]</sup> |
|                                                            | Inhalation(Rat) LC50: >2.1 mg/l4h <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Skin: no adverse effect observed (not irritating) <sup>[1]</sup>                     |
|                                                            | Oral (Rat) LD50: >5000 mg/kg <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                      |
| styrene                                                    | <b>TOXICITY</b><br>dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>IRRITATION</b><br>Eye (rabbit): 100 mg/24h - moderate                             |
|                                                            | Inhalation(Mouse) LC50: 9.5 mg/L4h <sup>[2]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Eye (rabbit): 100 mg/24h - moderate                                                  |
|                                                            | Oral (Mouse) LD50: 316 mg/kg <sup>[2]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Skin (rabbit): 500 mg - mild                                                         |
|                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Skin (rabbit): 500 mg - mild                                                         |
| sodium borosilicate                                        | <b>TOXICITY</b><br>Not Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>IRRITATION</b><br>Not Available                                                   |
| silica amorphous                                           | <b>TOXICITY</b><br>dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>IRRITATION</b><br>Eye (rabbit): non-irritating ** [Grace]                         |
|                                                            | Inhalation(Rat) LC50: >0.09<0.84 mg/l4h <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Eye: no adverse effect observed (not irritating) <sup>[1]</sup>                      |
|                                                            | Oral (Rat) LD50: >1000 mg/kg <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Skin (rabbit): non-irritating *                                                      |
|                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Skin: no adverse effect observed (not irritating) <sup>[1]</sup>                     |
| bentonite                                                  | <b>TOXICITY</b><br>Oral (Cat) LD50; >1.25 mg/kg <sup>[2]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>IRRITATION</b><br>Not Available                                                   |
| Magnesite                                                  | <b>TOXICITY</b><br>Oral (Rat) LD50: >2000 mg/kg <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>IRRITATION</b><br>Not Available                                                   |
| Dolomite                                                   | <b>TOXICITY</b><br>Not Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>IRRITATION</b><br>Not Available                                                   |
| Chlorite                                                   | <b>TOXICITY</b><br>Not Available                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>IRRITATION</b><br>Not Available                                                   |
| alkenes, C24-54alpha, branched and linear                  | <b>TOXICITY</b><br>Dermal (rabbit) LD50: >2000 mg/kg <sup>[2]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>IRRITATION</b><br>Eye (rabbit) : Not irritating *                                 |
|                                                            | Oral (Rat) LD50: >2000 mg/kg <sup>[2]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Skin (rabbit) : Not irritating *                                                     |
| silica crystalline - quartz                                | <b>TOXICITY</b><br>Oral (Rat) LD50: 500 mg/kg <sup>[2]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>IRRITATION</b><br>Not Available                                                   |
| trimethylolpropane                                         | <b>TOXICITY</b><br>dermal (rat) LD50: >500 mg/kg <sup>[2]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>IRRITATION</b><br>Not Available                                                   |
|                                                            | Inhalation(Rat) LC50: >0.29 mg/l4h <sup>[2]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                      |
|                                                            | Oral (Mouse) LD50; 14000 mg/kg <sup>[2]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                      |
| <b>Legend:</b>                                             | 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                      |

## Multi-Purpose Putty

|                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Multi-Purpose Putty                                                                          | Laboratory (in vitro) and animal studies show, exposure to the material may result in a possible risk of irreversible effects, with the possibility of producing mutation.<br>Data demonstrate that during inhalation exposure, aromatic hydrocarbons undergo substantial partitioning into adipose tissues. Following cessation of exposure, the level of aromatic hydrocarbons in body fats rapidly declines.                                                                                                                        |
| STYRENE                                                                                      | The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.<br><b>WARNING:</b> This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.                                                                                                                                                                                                                         |
| SODIUM BOROSILICATE                                                                          | Borosilicate ingredients are insoluble, inert, and will not significantly penetrate the skin. The metal ions are locked in the molecules and will not be absorbed into the body.                                                                                                                                                                                                                                                                                                                                                       |
| SILICA AMORPHOUS                                                                             | Reports indicate high/prolonged exposures to amorphous silicas induced lung fibrosis in experimental animals; in some experiments these effects were reversible. [PATTYS]<br>The substance is classified by IARC as Group 3:<br><b>NOT</b> classifiable as to its carcinogenicity to humans.<br>Evidence of carcinogenicity may be inadequate or limited in animal testing.                                                                                                                                                            |
| BENTONITE                                                                                    | For bentonite clays:<br>Bentonite (CAS No. 1302-78-9) consists of a group of clays formed by crystallization of vitreous volcanic ashes that were deposited in water. The expected acute oral toxicity of bentonite in humans is very low.                                                                                                                                                                                                                                                                                             |
| ALKENES, C24-54ALPHA, BRANCHED AND LINEAR                                                    | Animal studies show that normal alpha olefins have little or no toxic effects except in very severe inhalations. They cause minimal skin and eye irritation and do not sensitise the skin. Guinea pig, skin sensitisation – adjuvant test Rat, repeat dose oral toxicity – 90 days Mutagenicity – bacterial reverse mutation Genotoxicity – in vitro chromosomal aberration assay Genotoxicity – in vivo mouse micronucleus assay * NICNAS Full Public Report ethene, homopolymer, distn residues November 2017 (CAS RN: 260255-62-7)  |
| SILICA CRYSTALLINE - QUARTZ                                                                  | <b>WARNING:</b> For inhalation exposure <u>ONLY</u> : This substance has been classified by the IARC as Group 1: <b>CARCINOGENIC TO HUMANS</b><br><br>The International Agency for Research on Cancer (IARC) has classified occupational exposures to <b>respirable</b> (<5 µm) crystalline silica as being carcinogenic to humans. This classification is based on what IARC considered sufficient evidence from epidemiological studies of humans for the carcinogenicity of inhaled silica in the forms of quartz and cristobalite. |
| Multi-Purpose Putty & BENTONITE                                                              | Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound.                                                                                                                                                                                                                                                         |
| Multi-Purpose Putty & SILICA AMORPHOUS                                                       | For silica amorphous:<br>Derived No Adverse Effects Level (NOAEL) in the range of 1000 mg/kg/d.<br>In humans, synthetic amorphous silica (SAS) is essentially non-toxic by mouth, skin or eyes, and by inhalation. Epidemiology studies show little evidence of adverse health effects due to SAS.                                                                                                                                                                                                                                     |
| CASTOR OIL ACIDS, OXIDISED RESIDUES/BUTYLENE GLYCOL ESTERS & SODIUM BOROSILICATE & BENTONITE | No significant acute toxicological data identified in literature search.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

|                                   |   |                          |   |
|-----------------------------------|---|--------------------------|---|
| Acute Toxicity                    | ✓ | Carcinogenicity          | ✓ |
| Skin Irritation/Corrosion         | ✗ | Reproductivity           | ✓ |
| Serious Eye Damage/Irritation     | ✗ | STOT - Single Exposure   | ✓ |
| Respiratory or Skin sensitisation | ✗ | STOT - Repeated Exposure | ✓ |
| Mutagenicity                      | ✗ | Aspiration Hazard        | ✗ |

**Legend:** ✗ – Data either not available or does not fill the criteria for classification  
 ✓ – Data available to make classification

## SECTION 12 Ecological information

## Toxicity

| Multi-Purpose Putty                                        | Endpoint      | Test Duration (hr) | Species                       | Value         | Source        |
|------------------------------------------------------------|---------------|--------------------|-------------------------------|---------------|---------------|
|                                                            | Not Available | Not Available      | Not Available                 | Not Available | Not Available |
| castor oil acids, oxidised residues/butylene glycol esters | Endpoint      | Test Duration (hr) | Species                       | Value         | Source        |
|                                                            | Not Available | Not Available      | Not Available                 | Not Available | Not Available |
| Limestone                                                  | Endpoint      | Test Duration (hr) | Species                       | Value         | Source        |
|                                                            | Not Available | Not Available      | Not Available                 | Not Available | Not Available |
| Talc                                                       | Endpoint      | Test Duration (hr) | Species                       | Value         | Source        |
|                                                            | LC50          | 96h                | Fish                          | 89581.016mg/l | 2             |
|                                                            | EC50          | 96h                | Algae or other aquatic plants | 7202.7mg/l    | 2             |
|                                                            | NOEC(ECx)     | 720h               | Algae or other aquatic plants | 918.089mg/l   | 2             |
| styrene                                                    | Endpoint      | Test Duration (hr) | Species                       | Value         | Source        |
|                                                            | LC50          | 96h                | Fish                          | 3.29-5.05mg/l | 4             |
|                                                            | EC50          | 72h                | Algae or other aquatic plants | 1.4mg/l       | 1             |

Continued...

## Multi-Purpose Putty

|                                           |                                                                                                                                                                                                                                                                                                                          |                    |                               |                 |               |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------|-----------------|---------------|
|                                           | EC50                                                                                                                                                                                                                                                                                                                     | 48h                | Crustacea                     | 4.7mg/l         | 1             |
|                                           | NOEC(ECx)                                                                                                                                                                                                                                                                                                                | 96h                | Algae or other aquatic plants | 0.063mg/l       | 1             |
|                                           | EC50                                                                                                                                                                                                                                                                                                                     | 96h                | Algae or other aquatic plants | 0.72mg/l        | 1             |
| sodium borosilicate                       | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value           | Source        |
|                                           | Not Available                                                                                                                                                                                                                                                                                                            | Not Available      | Not Available                 | Not Available   | Not Available |
| silica amorphous                          | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value           | Source        |
|                                           | EC0(ECx)                                                                                                                                                                                                                                                                                                                 | 24h                | Crustacea                     | >=10000mg/l     | 1             |
|                                           | EC50                                                                                                                                                                                                                                                                                                                     | 96h                | Algae or other aquatic plants | 217.576mg/l     | 2             |
|                                           | EC50                                                                                                                                                                                                                                                                                                                     | 72h                | Algae or other aquatic plants | 14.1mg/l        | 2             |
|                                           | LC50                                                                                                                                                                                                                                                                                                                     | 96h                | Fish                          | 1033.016mg/l    | 2             |
|                                           | EC50                                                                                                                                                                                                                                                                                                                     | 48h                | Crustacea                     | >86mg/l         | 2             |
| bentonite                                 | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value           | Source        |
|                                           | LC50                                                                                                                                                                                                                                                                                                                     | 96h                | Fish                          | 19000mg/l       | 4             |
| Magnesite                                 | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value           | Source        |
|                                           | NOEC(ECx)                                                                                                                                                                                                                                                                                                                | 72h                | Algae or other aquatic plants | 18.5mg/l        | 2             |
|                                           | EC50                                                                                                                                                                                                                                                                                                                     | 72h                | Algae or other aquatic plants | >18.5mg/l       | 2             |
|                                           | LC50                                                                                                                                                                                                                                                                                                                     | 96h                | Fish                          | 2120mg/l        | 2             |
| Dolomite                                  | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value           | Source        |
|                                           | Not Available                                                                                                                                                                                                                                                                                                            | Not Available      | Not Available                 | Not Available   | Not Available |
| Chlorite                                  | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value           | Source        |
|                                           | Not Available                                                                                                                                                                                                                                                                                                            | Not Available      | Not Available                 | Not Available   | Not Available |
| alkenes, C24-54alpha, branched and linear | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value           | Source        |
|                                           | Not Available                                                                                                                                                                                                                                                                                                            | Not Available      | Not Available                 | Not Available   | Not Available |
| silica crystalline - quartz               | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value           | Source        |
|                                           | Not Available                                                                                                                                                                                                                                                                                                            | Not Available      | Not Available                 | Not Available   | Not Available |
| trimethylolpropane                        | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value           | Source        |
|                                           | BCF                                                                                                                                                                                                                                                                                                                      | 1008h              | Fish                          | 0.4-2.6         | 7             |
|                                           | EC0(ECx)                                                                                                                                                                                                                                                                                                                 | 48h                | Crustacea                     | >=102mg/l       | 1             |
|                                           | EC50                                                                                                                                                                                                                                                                                                                     | 72h                | Algae or other aquatic plants | >1000mg/l       | 2             |
|                                           | LC50                                                                                                                                                                                                                                                                                                                     | 96h                | Fish                          | >100mg/l        | 2             |
|                                           | EC50                                                                                                                                                                                                                                                                                                                     | 48h                | Crustacea                     | 10330-16360mg/l | 4             |
| Legend:                                   | Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data |                    |                               |                 |               |

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

For Aromatic Substances Series:

Environmental Fate: Large, molecularly complex polycyclic aromatic hydrocarbons, or PAHs, are persistent in the environment longer than smaller PAHs.

Atmospheric Fate: PAHs are "semi-volatile substances" which can move between the atmosphere and the Earth's surface in repeated, temperature-driven cycles of deposition and volatilization.

For styrene:

Transport: Styrene is expected to volatilise from surface waters, and is also removed from waters by adsorption onto soils and sediments. Under certain conditions, styrene may leach through soil (particularly sandy soils) and enter ground water.

Non-ionic polymers with MWs > 1,000 that do not contain reactive functional groups and are comprised of minimal low MW oligomers are estimated to display no effects at saturation (NES). These polymers display NES because the amount dissolved in water is not anticipated to reach a concentration at which adverse effects may be expressed.

For high molecular weight synthetic polymers: (according to the Sustainable Futures (SF) program (U.S. EPA 2005b; U.S. EPA 2012c) polymer assessment guidance.)

High MW polymers are expected:

- to have low vapour pressure and are not expected to undergo volatilization .

- to adsorb strongly to soil and sediment

- to be non-biodegradable (not anticipated to be assimilated by microorganisms.- therefore, biodegradation is not expected to be an important removal process. However many exceptions exist

High MW polymers are not expected to undergo removal by other degradative processes under environmental conditions

Microbial methylation plays important roles in the biogeochemical cycling of the metalloids and possibly in their detoxification. Many microorganisms (bacteria, fungi, and yeasts) and animals are now known to biomethylate arsenic, forming both volatile (e.g., methylarsines) and nonvolatile (e.g., methylarsonic acid and dimethylarsinic acid) compounds.

For Amorphous Silica: Amorphous silica is chemically and biologically inert. It is not biodegradable.

For Silica:

Continued...

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Environmental Fate: Most documentation on the fate of silica in the environment concerns dissolved silica, in the aquatic environment, regardless of origin, (man-made or natural), or structure, (crystalline or amorphous).

Terrestrial Fate: Silicon makes up 25.7% of the Earth's crust, by weight, and is the second most abundant element, being exceeded only by oxygen.

**DO NOT** discharge into sewer or waterways.

## Persistence and degradability

| Ingredient         | Persistence: Water/Soil     | Persistence: Air           |
|--------------------|-----------------------------|----------------------------|
| styrene            | HIGH (Half-life = 210 days) | LOW (Half-life = 0.3 days) |
| silica amorphous   | LOW                         | LOW                        |
| Magnesite          | LOW                         | LOW                        |
| trimethylolpropane | LOW                         | LOW                        |

## Bioaccumulative potential

| Ingredient         | Bioaccumulation        |
|--------------------|------------------------|
| styrene            | LOW (BCF = 77)         |
| silica amorphous   | LOW (LogKOW = 0.5294)  |
| Magnesite          | LOW (LogKOW = -0.4605) |
| trimethylolpropane | LOW (BCF = 16.2)       |

## Mobility in soil

| Ingredient         | Mobility          |
|--------------------|-------------------|
| styrene            | LOW (KOC = 517.8) |
| silica amorphous   | LOW (KOC = 23.74) |
| Magnesite          | HIGH (KOC = 1)    |
| trimethylolpropane | HIGH (KOC = 1)    |

## SECTION 13 Disposal considerations

## Waste treatment methods

|                              |                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product / Packaging disposal | <ul style="list-style-type: none"> <li>Containers may still present a chemical hazard/ danger when empty.</li> <li>Return to supplier for reuse/ recycling if possible.</li> <li><b>DO NOT</b> allow wash water from cleaning or process equipment to enter drains.</li> <li>It may be necessary to collect all wash water for treatment before disposal.</li> </ul> |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## SECTION 14 Transport information

## Labels Required

|                  |                                                                                     |
|------------------|-------------------------------------------------------------------------------------|
|                  |  |
| Marine Pollutant | NO                                                                                  |

Shipping container and transport vehicle placarding and labeling may vary from the below information. Products that are regulated for transport will be packaged and marked as Dangerous Goods in Excepted Quantities according to US DOT, IATA and IMDG regulations. In case of reshipment, it is the responsibility of the shipper to determine the appropriate labels and markings in accordance with applicable transport regulations.

## Land transport (DOT)

|                              |                     |                |
|------------------------------|---------------------|----------------|
| UN number or ID number       | 3269                |                |
| UN proper shipping name      | POLYESTER RESIN KIT |                |
| Transport hazard class(es)   | Class               | 3              |
|                              | Subsidiary risk     | Not Applicable |
| Packing group                | Not Applicable      |                |
| Environmental hazard         | Not Applicable      |                |
| Special precautions for user | Hazard Label        | 3              |
|                              | Special provisions  | 40, 149        |

## Air transport (ICAO-IATA / DGR)

|                            |                     |                |  |
|----------------------------|---------------------|----------------|--|
| UN number                  | 3269                |                |  |
| UN proper shipping name    | POLYESTER RESIN KIT |                |  |
| Transport hazard class(es) | ICAO/IATA Class     | 3              |  |
|                            | ICAO / IATA Subrisk | Not Applicable |  |

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|                              |                                                           |          |
|------------------------------|-----------------------------------------------------------|----------|
|                              | ERG Code                                                  | 3L       |
| Packing group                | III                                                       |          |
| Environmental hazard         | Not Applicable                                            |          |
| Special precautions for user | Special provisions                                        | A66 A163 |
|                              | Cargo Only Packing Instructions                           | 370      |
|                              | Cargo Only Maximum Qty / Pack                             | 10 kg    |
|                              | Passenger and Cargo Packing Instructions                  | 370      |
|                              | Passenger and Cargo Maximum Qty / Pack                    | 10 kg    |
|                              | Passenger and Cargo Limited Quantity Packing Instructions | Y370     |
|                              | Passenger and Cargo Limited Maximum Qty / Pack            | 5 kg     |

Sea transport (IMDG-Code / GGVSee)

|                              |                     |                |
|------------------------------|---------------------|----------------|
| UN number                    | 3269                |                |
| UN proper shipping name      | POLYESTER RESIN KIT |                |
| Transport hazard class(es)   | IMDG Class          | 3              |
|                              | IMDG Subrisk        | Not Applicable |
| Packing group                | III                 |                |
| Environmental hazard         | Not Applicable      |                |
| Special precautions for user | EMS Number          | F-E, S-D       |
|                              | Special provisions  | 236 340        |
|                              | Limited Quantities  | 5 L            |

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

| Product name                                               | Group         |
|------------------------------------------------------------|---------------|
| castor oil acids, oxidised residues/butylene glycol esters | Not Available |
| Limestone                                                  | Not Available |
| Talc                                                       | Not Available |
| styrene                                                    | Not Available |
| sodium borosilicate                                        | Not Available |
| silica amorphous                                           | Not Available |
| bentonite                                                  | Not Available |
| Magnesite                                                  | Not Available |
| Dolomite                                                   | Not Available |
| Chlorite                                                   | Not Available |
| alkenes, C24-54alpha, branched and linear                  | Not Available |
| silica crystalline - quartz                                | Not Available |
| trimethylolpropane                                         | Not Available |

Transport in bulk in accordance with the IGC Code

| Product name                                               | Ship Type     |
|------------------------------------------------------------|---------------|
| castor oil acids, oxidised residues/butylene glycol esters | Not Available |
| Limestone                                                  | Not Available |
| Talc                                                       | Not Available |
| styrene                                                    | Not Available |
| sodium borosilicate                                        | Not Available |
| silica amorphous                                           | Not Available |
| bentonite                                                  | Not Available |
| Magnesite                                                  | Not Available |
| Dolomite                                                   | Not Available |
| Chlorite                                                   | Not Available |
| alkenes, C24-54alpha, branched and linear                  | Not Available |
| silica crystalline - quartz                                | Not Available |

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| Product name       | Ship Type     |
|--------------------|---------------|
| trimethylolpropane | Not Available |

SECTION 15 Regulatory information

Safety, health and environmental regulations / legislation specific for the substance or mixture

|                                                                                                                                           |                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>castor oil acids, oxidised residues/butylene glycol esters is found on the following regulatory lists</b>                              |                                                                                                          |
| US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory                                                                     |                                                                                                          |
| <b>Limestone is found on the following regulatory lists</b>                                                                               |                                                                                                          |
| International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)                         | US OSHA Permissible Exposure Limits (PELs) Table Z-1                                                     |
| US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5                   | US OSHA Permissible Exposure Limits (PELs) Table Z-3                                                     |
| US - Massachusetts - Right To Know Listed Chemicals                                                                                       | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory                                    |
| US NIOSH Recommended Exposure Limits (RELs)                                                                                               |                                                                                                          |
| <b>Talc is found on the following regulatory lists</b>                                                                                    |                                                                                                          |
| Chemical Footprint Project - Chemicals of High Concern List                                                                               | US - Massachusetts - Right To Know Listed Chemicals                                                      |
| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs                                             | US NIOSH Carcinogen List                                                                                 |
| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2B: Possibly carcinogenic to humans | US NIOSH Recommended Exposure Limits (RELs)                                                              |
| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic            | US OSHA Permissible Exposure Limits (PELs) Table Z-1                                                     |
| International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)                         | US OSHA Permissible Exposure Limits (PELs) Table Z-3                                                     |
| US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5                   | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory                                    |
| <b>styrene is found on the following regulatory lists</b>                                                                                 |                                                                                                          |
| Chemical Footprint Project - Chemicals of High Concern List                                                                               | US Clean Air Act - Hazardous Air Pollutants                                                              |
| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs                                             | US CWA (Clean Water Act) - List of Hazardous Substances                                                  |
| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 2A: Probably carcinogenic to humans | US DOE Temporary Emergency Exposure Limits (TEELs)                                                       |
| US - California Hazardous Air Pollutants Identified as Toxic Air Contaminants                                                             | US EPA Integrated Risk Information System (IRIS)                                                         |
| US - California Proposition 65 - Carcinogens                                                                                              | US EPCRA Section 313 Chemical List                                                                       |
| US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens                                                       | US National Toxicology Program (NTP) 15th Report Part B. Reasonably Anticipated to be a Human Carcinogen |
| US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List                                               | US NIOSH Recommended Exposure Limits (RELs)                                                              |
| US - Massachusetts - Right To Know Listed Chemicals                                                                                       | US OSHA Permissible Exposure Limits (PELs) Table Z-2                                                     |
| US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)                                                                              | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory                                    |
| <b>sodium borosilicate is found on the following regulatory lists</b>                                                                     |                                                                                                          |
| International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)                         | US OSHA Permissible Exposure Limits (PELs) Table Z-1                                                     |
| US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5                   | US OSHA Permissible Exposure Limits (PELs) Table Z-3                                                     |
| US NIOSH Recommended Exposure Limits (RELs)                                                                                               |                                                                                                          |
| <b>silica amorphous is found on the following regulatory lists</b>                                                                        |                                                                                                          |
| Chemical Footprint Project - Chemicals of High Concern List                                                                               | US DOE Temporary Emergency Exposure Limits (TEELs)                                                       |
| International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic            | US NIOSH Carcinogen List                                                                                 |
| International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)                         | US NIOSH Recommended Exposure Limits (RELs)                                                              |
| US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5                   | US OSHA Carcinogens Listing                                                                              |
| US - California - Biomonitoring - Priority Chemicals                                                                                      | US OSHA Permissible Exposure Limits (PELs) Table Z-1                                                     |
| US - California Proposition 65 - Carcinogens                                                                                              | US OSHA Permissible Exposure Limits (PELs) Table Z-3                                                     |
| US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List                                               | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory                                    |
| US - Massachusetts - Right To Know Listed Chemicals                                                                                       |                                                                                                          |
| <b>bentonite is found on the following regulatory lists</b>                                                                               |                                                                                                          |
| International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)                         | US OSHA Permissible Exposure Limits (PELs) Table Z-1                                                     |
| US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5                   | US OSHA Permissible Exposure Limits (PELs) Table Z-3                                                     |
| US NIOSH Recommended Exposure Limits (RELs)                                                                                               | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory                                    |
| <b>Magnesite is found on the following regulatory lists</b>                                                                               |                                                                                                          |
| US - Massachusetts - Right To Know Listed Chemicals                                                                                       | US OSHA Permissible Exposure Limits (PELs) Table Z-1                                                     |
| US DOE Temporary Emergency Exposure Limits (TEELs)                                                                                        | US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory                                    |
| US NIOSH Recommended Exposure Limits (RELs)                                                                                               |                                                                                                          |
| <b>Dolomite is found on the following regulatory lists</b>                                                                                |                                                                                                          |

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US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

Chlorite is found on the following regulatory lists

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5

US NIOSH Recommended Exposure Limits (RELs)

alkenes, C24-54alpha, branched and linear is found on the following regulatory lists

International WHO List of Proposed Occupational Exposure Limit (OEL) Values for Manufactured Nanomaterials (MNMS)

US - Alaska Air Quality Control - Concentrations Triggering an Air Quality Episode for Air Pollutants Other Than PM-2.5

US NIOSH Recommended Exposure Limits (RELs)

silica crystalline - quartz is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans

US - California Proposition 65 - Carcinogens

US - California Safe Drinking Water and Toxic Enforcement Act of 1986 - Proposition 65 List

US - Massachusetts - Right To Know Listed Chemicals

US DOE Temporary Emergency Exposure Limits (TEELs)

trimethylolpropane is found on the following regulatory lists

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

US National Toxicology Program (NTP) 15th Report Part A Known to be Human Carcinogens

US NIOSH Carcinogen List

US NIOSH Recommended Exposure Limits (RELs)

US OSHA Carcinogens Listing

US OSHA Permissible Exposure Limits (PELs) Table Z-1

US OSHA Permissible Exposure Limits (PELs) Table Z-3

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 hazard categories

|                                                              |     |
|--------------------------------------------------------------|-----|
| Flammable (Gases, Aerosols, Liquids, or Solids)              | Yes |
| Gas under pressure                                           | No  |
| Explosive                                                    | No  |
| Self-heating                                                 | No  |
| Pyrophoric (Liquid or Solid)                                 | No  |
| Pyrophoric Gas                                               | No  |
| Corrosive to metal                                           | No  |
| Oxidizer (Liquid, Solid or Gas)                              | No  |
| Organic Peroxide                                             | No  |
| Self-reactive                                                | No  |
| In contact with water emits flammable gas                    | No  |
| Combustible Dust                                             | No  |
| Carcinogenicity                                              | Yes |
| Acute toxicity (any route of exposure)                       | Yes |
| Reproductive toxicity                                        | Yes |
| Skin Corrosion or Irritation                                 | No  |
| Respiratory or Skin Sensitization                            | No  |
| Serious eye damage or eye irritation                         | No  |
| Specific target organ toxicity (single or repeated exposure) | Yes |
| Aspiration Hazard                                            | No  |
| Germ cell mutagenicity                                       | No  |
| Simple Asphyxiant                                            | No  |
| Hazards Not Otherwise Classified                             | No  |

US. EPA CERCLA Hazardous Substances and Reportable Quantities (40 CFR 302.4)

| Name    | Reportable Quantity in Pounds (lb) | Reportable Quantity in kg |
|---------|------------------------------------|---------------------------|
| styrene | 1000                               | 454                       |

State Regulations

US. California Proposition 65

 **WARNING:** This product can expose you to chemicals including **styrene**, **silica amorphous**, **silica crystalline - quartz**, which are known to the State of California to cause cancer. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

National Inventory Status

| National Inventory | Status |
|--------------------|--------|
|--------------------|--------|

Continued...

| National Inventory                             | Status                                                                                                                                                                                            |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Australia - AIC / Australia Non-Industrial Use | No (castor oil acids, oxidised residues/butylene glycol esters; Chlorite)                                                                                                                         |
| Canada - DSL                                   | No (castor oil acids, oxidised residues/butylene glycol esters; Limestone; Dolomite; Chlorite)                                                                                                    |
| Canada - NDSL                                  | No (Talc; styrene; sodium borosilicate; bentonite; Magnesite; Chlorite; alkenes, C24-54alpha, branched and linear; silica crystalline - quartz; trimethylolpropane)                               |
| China - IECSC                                  | No (castor oil acids, oxidised residues/butylene glycol esters)                                                                                                                                   |
| Europe - EINEC / ELINCS / NLP                  | No (castor oil acids, oxidised residues/butylene glycol esters; sodium borosilicate; alkenes, C24-54alpha, branched and linear)                                                                   |
| Japan - ENCS                                   | No (castor oil acids, oxidised residues/butylene glycol esters; Limestone; bentonite; Dolomite; Chlorite; alkenes, C24-54alpha, branched and linear)                                              |
| Korea - KECI                                   | Yes                                                                                                                                                                                               |
| New Zealand - NZIoC                            | No (castor oil acids, oxidised residues/butylene glycol esters)                                                                                                                                   |
| Philippines - PICCS                            | No (castor oil acids, oxidised residues/butylene glycol esters)                                                                                                                                   |
| USA - TSCA                                     | No (sodium borosilicate; Chlorite)                                                                                                                                                                |
| Taiwan - TCSI                                  | Yes                                                                                                                                                                                               |
| Mexico - INSQ                                  | No (castor oil acids, oxidised residues/butylene glycol esters; sodium borosilicate; Chlorite; alkenes, C24-54alpha, branched and linear)                                                         |
| Vietnam - NCI                                  | Yes                                                                                                                                                                                               |
| Russia - FBEPH                                 | No (castor oil acids, oxidised residues/butylene glycol esters; sodium borosilicate; Chlorite; alkenes, C24-54alpha, branched and linear)                                                         |
| Legend:                                        | Yes = All CAS declared ingredients are on the inventory<br>No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration. |

SECTION 16 Other information

|               |            |
|---------------|------------|
| Revision Date | 05/09/2023 |
| Initial Date  | 05/22/2022 |

SDS Version Summary

| Version | Date of Update | Sections Updated                                                                                                                                                                                                                                                                                                                                              |
|---------|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.9     | 05/08/2023     | Toxicological information - Chronic Health, Hazards identification - Classification, Exposure controls / personal protection - Engineering Control, Composition / information on ingredients - Ingredients, Exposure controls / personal protection - Personal Protection (other), Exposure controls / personal protection - Personal Protection (Respirator) |

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.

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