

## SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1. **Product identifier:**  
**4100 Series Liquid Neutralizer For Acids**
- 1.2. **Relevant identified uses of the substance or mixture and uses advised against:**  
Used for spill clean-up and neutralizing acids. For industrial and professional use.  
  
Chemical Products Categories:  
PC20 – Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents
- 1.3. **Details of the supplier of the safety data sheet:**  
  
Information about the manufacturer:  
**FyterTech Nonwovens, LLC**  
2121-B American Blvd  
De Pere, WI 54115  
Tel: (800) 615-8699  
Web: [www.fytertech.com](http://www.fytertech.com)  
Email: [cs@fytertech.com](mailto:cs@fytertech.com)
- 1.3.1. Responsible person: Customer Service  
E-mail: [cs@fytertech.com](mailto:cs@fytertech.com)
- 1.4. **Emergency telephone number:** (800) 424-9300 (USA); +1 (703) 527-3887 (International and Maritime)

### SECTION 2: HAZARDS IDENTIFICATION

- 2.1. **Classification of the substance or mixture:**  
  
Classification according to Regulation (EC) No 1272/2008 (CLP):  
  
**Not considered as hazardous mixture.**  
  
**Hazard statements:** No hazard statements.
- 2.2. **Label elements:**  
  
**Hazard statements:** No hazard statements.  
  
**Precautionary statements:** No precautionary statements.  
  
**EUH 210** – Safety data sheet available on request.
- 2.3. **Other hazards:**  
Exposure may aggravate pre-existing eye, skin, or respiratory conditions.  
Results of PBT and vPvB assessment: Based on available data, the product does not contain any PBT or vPvB substances.  
Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. **Substances:**  
Not applicable.

3.2. **Mixtures:**

Description	CAS number	EC number / ECHA list number	REACH registration number	Conc. (%)	Classification according to Regulation (EC) No 1272/2008 (CLP)		
					Pictogram, signal word code(s)	Hazard class and category code(s)	Hazard statement code(s)
<b>Triethanolamine*</b>	102-71-6	203-049-8	-	ca. 52.93	-	not classified	-
<b>Water</b>	7732-18-5	231-791-2	-	ca. 47.07	-	not classified	-
<b>Diethanolamine**</b> Index number: 603-071-00-1	111-42-2	203-868-0	-	<0.265	GHS08 GHS05 GHS07 Danger	Acute Tox. 4 STOT RE 2 Skin Irrit. 2 Eye Dam. 1 Carc. 2 Aquatic Chronic 3	H302 H373 H315 H318 H351 H412
<b>Alizarin*</b>	72-48-0	200-782-5	-	0.0016	GHS05 GHS07 GHS09 Danger	Eye Dam. 1 Skin Sens. 1A Aquatic Chronic 1	H318 H317 H410

\*: Classification specified by the manufacturer; the substance is not listed in Annex VI of the Regulation (EC) No 1272/2008.

\*\* : Classification specified by the manufacturer that includes other classification in addition to the classification specified by Regulation (EC) No 1272/2008.

For the full text of hazard statements, see Section 16.

## SECTION 4: FIRST AID MEASURES

4.1. **Description of first aid measures:**

**General information:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**INGESTION:**

Measures:

- Rinse mouth.
- Do NOT induce vomiting.
- Obtain medical attention.

**INHALATION:**

Measures:

- When symptoms occur: go into open air and ventilate suspected area.
- Obtain medical attention if breathing difficulty persists.

**SKIN CONTACT:**

Measures:

- Remove contaminated clothing.
- Drench affected area with water for at least 5 minutes.
- Obtain medical attention if irritation develops or persists.

**EYE CONTACT:**

Measures:

- Rinse cautiously with water for at least 5 minutes.
- Remove contact lenses, if present and easy to do. Continue rinsing.
- Obtain medical attention if irritation develops or persists.

**4.2. Most important symptoms and effects, both acute and delayed:**

Symptoms/effects: Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation: Prolonged exposure may cause irritation.

Symptoms/effects after skin contact: Prolonged exposure may cause skin irritation. Prolonged or repeated contact with the skin may cause dermatitis.

Symptoms/effects after eye contact: May cause slight irritation to eyes.

Symptoms/effects after ingestion: Ingestion may cause adverse effects.

Chronic symptoms: Repeated or prolonged contact with skin may cause dermatitis. This product contains amines which can combine with nitrites or other nitrosating agents to form nitrosamines which some have been found to cause cancer in animals.

**4.3. Indication of any immediate medical attention and special treatment needed:**

If exposed or concerned, get medical advice and attention.

If medical advice is needed, have product container or label at hand.

## SECTION 5: FIREFIGHTING MEASURES

**5.1. Extinguishing media:**

**5.1.1. Suitable extinguishing media:**

Water spray, fog, carbon dioxide (CO<sub>2</sub>), alcohol-resistant foam, or dry chemical.

**5.1.2. Unsuitable extinguishing media:**

Do not use full water jet, because it can disperse and spread fire.

**5.2. Special hazards arising from the substance or mixture:**

Not considered flammable but may burn at high temperatures.

Product is not explosive.

Hazardous reactions will not occur under normal conditions.

In case of fire, smoke and other combustion products (nitrogen oxides, carbon oxides (CO, CO<sub>2</sub>)) may be formed; the inhalation of such combustion products can have serious adverse effects on health.

**5.3. Advice for firefighters:**

Exercise caution when fighting any chemical fire.

Do not enter fire area without proper protective equipment, including respiratory protection.

Cool the fire affected containers with water spray.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures:**

**6.1.1. For non-emergency personnel:**

Allow only well-trained experts wearing suitable protective clothing to abide in the field of accident.

Use appropriate personal protective equipment (PPE). Evacuate unnecessary personnel.

**6.1.2. For emergency responders:**

Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

Equip clean-up crew with proper protection.

Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

**6.2. Environmental precautions:**

Dispose of the spillage and the resulting waste according to the applicable environmental regulations. Do not allow the product and the resulting waste to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

**6.3. Methods and material for containment and cleaning up:**

For containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

**6.4. Reference to other sections:**

For further and detailed information see Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling:

Observe conventional hygiene precautions.

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Avoid prolonged contact with eyes, skin and clothing.

Avoid breathing vapours, mist, spray.

Observe the pertinent regulations on industrial safety and basic hygiene rules.

#### **Technical measures:**

Ensure exposure is below occupational exposure limits (where available).

#### **Precautions against fire and explosion:**

No special measures required.

### 7.2. Conditions for safe storage, including any incompatibilities:

#### **Technical measures and storage condition:**

Comply with applicable regulations.

Keep container closed when not in use.

Store in a dry, cool place.

Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible materials:** See Section 10.5.

**Packaging material:** No special prescriptions.

### 7.3. Specific end use(s):

Spill cleanup/ neutralize acids. For professional use only.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters:

**Occupational exposure limit values** (Commission Directive (EC) No 2000/39 of 8 June 2000):

The components of the mixture are not regulated with exposure limit value.

DNEL values		Oral exposure		Dermal exposure		Inhalative exposure	
		Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)	Short term (acute)	Long term (chronic)
Consumer	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data
Worker	Local	no data	no data	no data	no data	no data	no data
	Systemic	no data	no data	no data	no data	no data	no data

PNEC values		
Compartment	Value	Note(s)
Freshwater	no data	no notes
Marine water	no data	no notes
Freshwater sediment	no data	no notes
Marine water sediment	no data	no notes
Sewage Treatment Plant (STP)	no data	no notes
Intermittent release	no data	no notes
Secondary poisoning	no data	no notes
Soil	no data	no notes

### 8.2. Exposure controls:

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

#### 8.2.1. Appropriate engineering controls:

In pursuance of work is proper foresight needed to avoid leaking onto clothes and floors and to avoid contact with eyes and skin.

Suitable eye/body wash equipment should be available in the vicinity of any potential exposure.

Ensure adequate ventilation, especially in confined areas.

Ensure all national/local regulations are observed.

- 8.2.2. **Individual protection measures, such as personal protective equipment:**  
 Materials for protective clothing: Chemically resistant materials and fabrics.  
 Do not eat, drink, or smoke when using this product.
1. **Eye/face protection:** Use appropriate protective glasses (EN ISO 16321-1:2022; EN 166).
  2. **Skin protection:**
    - a. **Hand protection:** Use appropriate protective gloves (EN 374).
    - b. **Other:** Use appropriate protective clothing.
  3. **Respiratory protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
  4. **Thermal hazards:** No thermal hazards known.
- 8.2.3. **Environmental exposure controls:**  
 No specific prescription.
- The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions, an expert's advice is necessary before deciding upon further protective measures.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties:

Parameter	Value / Test method / Remarks
1. Physical state	liquid
2. Colour	purple
3. Odour, odour threshold	ammonia-like
4. Melting point/freezing point	no data*
5. Boiling point or initial boiling point and boiling range	no data*
6. Flammability	not applicable
7. Lower and upper explosion limit	no data*
8. Flash point	no data*
9. Auto-ignition temperature	no data*
10. Decomposition temperature	no data*
11. pH	no data*
12. Kinematic viscosity	no data*
13. Solubility in water in other solvents	miscible no data*
14. Partition coefficient n-octanol/water (log value)	no data*
15. Vapour pressure	no data*
16. Density and/or relative density	no data*
17. Relative vapour density	no data*
18. Particle characteristics	no data*

### 9.2. Other information:

#### 9.2.1. Information with regard to physical hazard classes:

No further data available or not applicable for the product.

#### 9.2.2. Other safety characteristics:

VOC content: <1 %

\*: The manufacturer did not carry out any tests on this parameter for the product or the results of the tests are not available at the time of publication of the data sheet, or the property is not applicable for the product.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity:

Hazardous reactions will not occur under normal conditions.

### 10.2. Chemical stability:

Stable under recommended handling and storage conditions (see section 7).

### 10.3. Possibility of hazardous reactions:

Hazardous polymerization will not occur.

- 10.4. Conditions to avoid:**  
Direct sunlight, extremely high or low temperatures, and incompatible materials.
- 10.5. Incompatible materials:**  
Isocyanates, halogenated organics, peroxides, phenols, epoxides, anhydrides, halides, and oxidizers.
- 10.6. Hazardous decomposition products:**  
None expected under normal conditions of use.

## SECTION 11: TOXICOLOGICAL INFORMATION

- 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008:**  
**Acute toxicity:** Based on available data, the classification criteria are not met.  
**Skin corrosion/irritation:** Based on available data, the classification criteria are not met.  
**Serious eye damage/irritation:** Based on available data, the classification criteria are not met.  
**Respiratory or skin sensitisation:** Based on available data, the classification criteria are not met.  
**Germ cell mutagenicity:** Based on available data, the classification criteria are not met.  
**Carcinogenicity:** Based on available data, the classification criteria are not met.  
**Reproductive toxicity:** Based on available data, the classification criteria are not met.  
**STOT-single exposure:** Based on available data, the classification criteria are not met.  
**STOT-repeated exposure:** Based on available data, the classification criteria are not met.  
**Aspiration hazard:** Based on available data, the classification criteria are not met.
- 11.1.1. Summaries of the information derived from the test conducted:**  
No data available.
- 11.1.2. Relevant toxicological properties:**  
No data available about the product.  
Information about the components:  
**Triethanolamine** (CAS: 102-71-6):  
Acute toxicity:  
LD<sub>50</sub> (oral, rat): 6400 mg/kg  
LD<sub>50</sub> (dermal, rabbit): >2000 mg/kg  
**Diethanolamine** (CAS: 111-42-2):  
Acute toxicity:  
LD<sub>50</sub> (oral, rat, male and female): 1600 mg/kg (OECD 401 or equivalent)  
LD<sub>50</sub> (dermal, rabbit): >8200 mg/kg  
LC<sub>50</sub> (inhalation, dust/mist, rat, male): 3.35 mg/l/4 hours  
Carcinogenicity:  
IARC: 2B  
ACGIH: A3  
**Alizarin** (CAS: 72-48-0):  
Acute toxicity:  
LD<sub>50</sub> (orale, rat, female): >2000 mg/kg (OECD 423)
- 11.1.3. Information on likely routes of exposure:**  
Ingestion, inhalation, skin contact, eye contact.
- 11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:**  
Symptoms/effects: Not expected to present a significant hazard under anticipated conditions of normal use.  
Symptoms/effects after inhalation: Prolonged exposure may cause irritation.  
Symptoms/effects after skin contact: Prolonged exposure may cause skin irritation. Prolonged or repeated contact with the skin may cause dermatitis.  
Symptoms/effects after eye contact: May cause slight irritation to eyes.  
Symptoms/effects after ingestion: Ingestion may cause adverse effects.  
Chronic symptoms: Repeated or prolonged contact with skin may cause dermatitis. This product contains amines which can combine with nitrites or other nitrosating agents to form nitrosamines which some have been found to cause cancer in animals.
- 11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure:**  
No data available.
- 11.1.6. Interactive effects:**  
No data available.
- 11.1.7. Absence of specific data:**  
No information.
- 11.2. Information on other hazards:**  
**Endocrine disrupting properties:**  
Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.  
**Other information:**  
No data available.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity:

The mixture is not classified as hazardous for the environment.

Information about the components:

**Triethanolamine** (CAS: 102-71-6):

LC<sub>50</sub> (Pimephales promelas): 11,800 mg/l/96 h (OECD 203 or equivalent)

EC<sub>50</sub> (Ceriodaphnia dubia): 609.9 mg/l/48 h (OECD 202 or equivalent)

CEr<sub>50</sub> (Scenedesmus sp.): 512 mg/l/72 h (OECD 201 or equivalent)

EC<sub>50</sub> (activated sludge): >1000 mg/l/3 h (OECD 209)

NOEC (Daphnia magna): 16 mg/l/21 days

**Diethanolamine** (CAS: 111-42-2):

LC<sub>50</sub> (Pimephales promelas): 1460 mg/l/96 h (OECD 203 or equivalent)

EC<sub>50</sub> (Daphnia magna): 55 mg/l/48 h (OECD 202 or equivalent)

ECr<sub>50</sub> (Pseudokirchneriella subcapitata): 2.2 mg/l/96 h (OECD 201 or equivalent)

NOEC (Pseudokirchneriella subcapitata): 0.6 mg/l/72 h (OECD 201 or equivalent)

LC<sub>50</sub> (activated sludge): >1000 mg/l/3 h (OECD 209)

NOEC (Daphnia magna): 0.78 mg/l/21 days

**Alizarin** (CAS: 72-48-0):

LC<sub>50</sub> (Oryzias latipes): 1.1 mg/l/48 h (ECOTOX)

EC<sub>50</sub> (Daphnia magna): 1.58 mg/l/48 h (OECD 202)

### 12.2. Persistence and degradability:

Information about the components:

**Triethanolamine** (CAS: 102-71-6):

97 % / 28 days (OECD 301A or equivalent)

89 % / 14 days (OECD 302B or equivalent)

ThOD: 2.04 mg/kg

**Diethanolamine** (CAS: 111-42-2):

93 % / 28 days (OECD 301F or equivalent)

ThOD: 2.13 mg/kg

COX: 1.33 mg/kg

**Alizarin** (CAS: 72-48-0):

19.6 % / 28 days

### 12.3. Bioaccumulative potential:

Information about the components:

**Triethanolamine** (CAS: 102-71-6):

BCF (Cyprinus carpio) : <3.9 (42 days)

log Pow: -2.3 (25 °C)

**Diethanolamine** (CAS: 111-42-2):

log Pow: -2.18 (25 °C) (OECD 107 or equivalent)

### 12.4. Mobility in soil:

Information about the components:

**Triethanolamine** (CAS: 102-71-6):

Koc: 10 (estimated)

### 12.5. Results of PBT and vPvB assessment:

Based on available data, the product does not contain any PBT or vPvB substances.

### 12.6. Endocrine disrupting properties:

Endocrine disrupting property: Based on available data, does not contain endocrine disruptors.

### 12.7. Other adverse effects:

Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods:

Disposal according to the local regulations.

### 13.1.1. Information regarding the disposal of the product:

Dispose of in accordance with applicable regulations.  
Avoid release to the environment.

#### List of Waste Code:

No waste disposal key according to the List of Waste Code (LoW code) can be determined for this product, as only the purpose of application defined by the user enables an allocation. The LoW code number has to be determined after a discussion with a waste disposal specialist.

### 13.1.2. Information regarding the disposal of the packaging:

Dispose of in accordance with applicable regulations.  
Container may remain hazardous when empty. Continue to observe all precautions.

### 13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified:

No data available.

### 13.1.4. Sewage disposal:

No data available.

### 13.1.5. Special precautions for any recommended waste treatment:

No data available.

## SECTION 14: TRANSPORT INFORMATION

### ADR/RID; ADN; IMDG; IATA:

Not subject to the conventions of carriage of dangerous goods.

### 14.1. UN number or ID number:

No UN or ID number.

### 14.2. UN proper shipping name:

No proper shipping name.

### 14.3. Transport hazard class(es):

No transport hazard classes.

### 14.4. Packing group:

No packing group.

### 14.5. Environmental hazards:

Environmentally hazardous: No.  
Marine pollutant: No.

### 14.6. Special precautions for user:

No relevant information available.

### 14.7. Maritime transport in bulk according to IMO instruments:

Not applicable.

## SECTION 15: REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:

**REGULATION (EC) No 1907/2006** OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive (EC) No 1999/45 and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive (EEC) No 76/769 and Commission Directives (EEC) No 91/155, (EEC) No 93/67, (EC) No 93/105 and (EC) No 2000/21

**REGULATION (EC) No 1272/2008** OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives (EEC) No 67/548 and (EC) No 1999/45, and amending Regulation (EC) No 1907/2006

**COMMISSION REGULATION (EU) 2020/878** of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)



Contains no REACH substances with Annex XVII restrictions.  
Contains no substance on the REACH candidate list.  
Contains no REACH Annex XIV substances.

15.2. **Chemical safety assessment:** Has not been carried out.

## SECTION 16: OTHER INFORMATION

### Information regarding the revision of the safety data sheet:

Changes compared to the previous version: Sections 3.2, 9.1, 11.1.2, 12.1 – 12.4 and 16 of the safety data sheet have been modified.

The composition of the mixture was modified compared to the previous version.

The hazard classification of the mixture did not change compared to the previous version.

This safety data sheet supersedes all previous versions according to Annex II of Regulation (EC) No 1907/2006.

### Literature references / data sources:

Previous version of the safety data sheet (25. 11. 2024, version 4)

Information provided by the manufacturer.

### Methods used for the classification according to Regulation (EC) No 1272/2008:

Based on the calculation method carried out on the basis of the known hazards of the components, not considered as a hazardous mixture.

### Relevant hazard statements (code and full text) of Sections 2 and 3:

**H302** – Harmful if swallowed.

**H315** – Causes skin irritation.

**H317** – May cause an allergic skin reaction.

**H318** – Causes serious eye damage.

**H351** – Suspected of causing cancer *<state route of exposure if it is conclusively proven that no other routs of exposure cause the hazard>*.

**H373** – May cause damage to organs *<or state all organs affected, if known>* through prolonged or repeated exposure *<state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>*.

**H410** – Very toxic to aquatic life with long lasting effects.

**H412** – Harmful to aquatic life with long lasting effects.

**EUH 210** – Safety data sheet available on request.

**Training advice:** No data available.

### Full text of the abbreviations in the safety data sheet:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute Toxicity Estimate.

AOX: Adsorbable organic halides.

BCF: Bioconcentration factor.

BOD: Biological Oxygen Demand.

CAS number: Chemical Abstract Service number.

CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

CMR effects: Carcinogenic, mutagenic, reprotoxic effects.

COD: Chemical Oxygen Demand.

CSA: Chemical Safety Assessment.

CSR: Chemical Safety Report.

DNEL: Derived-No-Effect-Level.

ECHA: European Chemical Agency.

EC: European Community.

EC number: EINECS and ELINCS numbers (see also EINECS and ELINCS).

EEC: European Economic Community.

EEA: European Economic Area (EU + Iceland, Liechtenstein and Norway).

EINECS: European Inventory of Existing Commercial Chemical Substances.

ELINCS: European List of Notified Chemical Substances.

EN: European Norm.

EU: European Union.

EuPCS: European Product Categorisation System.  
EWC: European Waste Catalogue (replaced by LoW – see below).  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.  
IATA: International Air Transport Association.  
ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.  
IMDG: International Maritime Dangerous Goods.  
IMO: International Maritime Organization.  
IMSBC: International Maritime Solid Bulk Cargoes.  
IUCLID: International Uniform Chemical Information Database.  
IUPAC: International Union of Pure and Applied Chemistry.  
Kow: n-Octanol - Water Partition Coefficient.  
LC50: Lethal concentration resulting in 50 % mortality.  
LD50: Lethal dose resulting in 50 % mortality (median lethal dose).  
LoW: List of Waste.  
LOEC: Lowest Observed Effect Concentration.  
LOEL: Lowest Observed Effect Level.  
NOEC: No Observed Effect Concentration.  
NOEL: No Observed Effect Level.  
NOAEC: No Observed Adverse Effect Concentration.  
NOAEL: No Observed Adverse Effect Level.  
OECD: Organization for Economic Cooperation and Development.  
OSHA: Occupational Safety and Health Administration.  
PBT: Persistent, Bioaccumulative and Toxic.  
PNEC: Predicted No Effect Concentration.  
QSAR: Quantitative Structure Activity Relationship.  
REACH: Regulation 1907/2006/EC concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.  
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail.  
SCBA: Self Contained Breathing Apparatus.  
SDS: Safety Data Sheet.  
STOT: Specific Target Organ Toxicity.  
SVHC: Substances of Very High Concern.  
UN: United Nations.  
UVCB: Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials.  
VOC: Volatile Organic Compound.  
vPvB: very Persistent and very Bioaccumulative.

This safety data sheet had been prepared on the basis of information provided by the manufacturer/supplier and conform to the relevant regulations.

The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information.

The SDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required.

Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and assume all risk associated with the use of this product.

It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.

---

Safety data sheet was prepared by:  
**MSDS-Europe**  
International branch of ToxInfo Kft.

Professional help regarding  
the explanation of the safety  
data sheet:  
+36 70 335 8480; [info@msds-europe.com](mailto:info@msds-europe.com)  
[www.msds-europe.com](http://www.msds-europe.com)

