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ILLINGTM
P A C K A G I N G

Product Specification Sheet

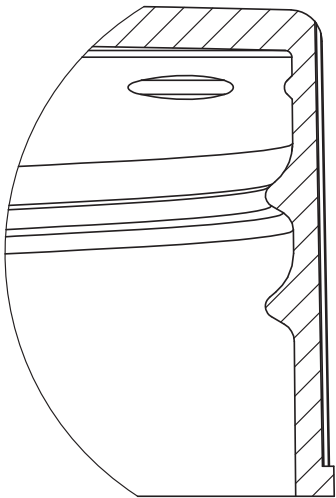
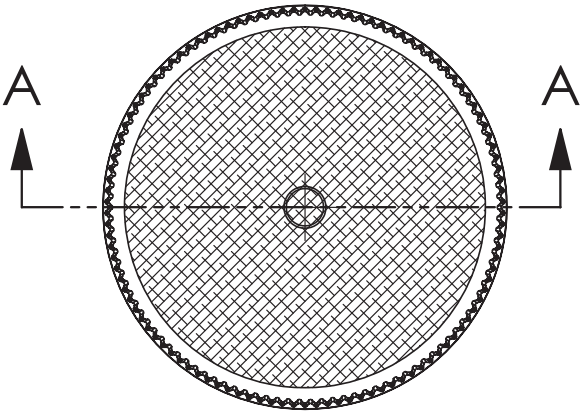
Illing Part#

3660BPET

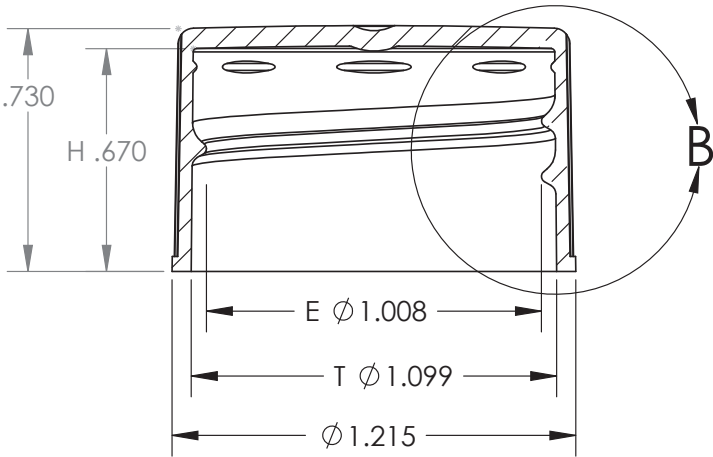
28-410 BLK PET FINE R/M CAP W/FS 3-25 LINER

Part #: 3660BPET

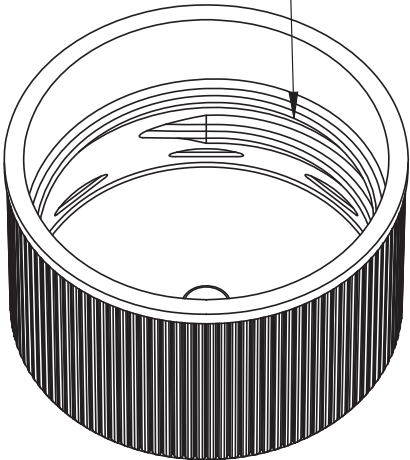
Size:	28MM
Color:	BLACK
Material:	POLYETHYLENE TEREPHTHALATE
Style:	FINE RIBBED, MATTE TOP
Additional Info:	WITH FS 3-25 LINER FOR PET
Case Pack:	2,900 / EACH
Pallet Pack:	101,500 / EACH



DETAIL B
SCALE 4 : 1



6 THREADS PER INCH
.167 LEAD 1 1/4 TURNS



UNLESS OTHERWISE SPECIFIED:

PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THIS
DRAWING IS THE SOLE PROPERTY OF
<INSERT COMPANY NAME HERE>. ANY
REPRODUCTION IN PART OR AS A WHOLE
WITHOUT THE WRITTEN PERMISSION OF
RELIABLE CAPS, LLC IS PROHIBITED.

		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±.008		NAME DRAWN RH	DATE 1-26-15	RELIABLE CAPS, LLC	
		MATERIAL POLYPROPYLENE		CHECKED		28-410 STRIP MOLD CAP	
		FINISH APPLICATION		ENG APPR.			
				MFG APPR.			
				Q.A.			
NEXT ASSY		USED ON		COMMENTS:		SIZE A	REV. A
APPLICATION		DO NOT SCALE DRAWING				DWG. NO. 28-410	
						SCALE:2:1	WEIGHT:
						SHEET 1 OF 1	


 Homopolymer - High Level of Antistat
 - High Flow Reactor

 POLYPROPYLENE
 3721WZ

High Flow. TOTAL Polypropylene 3721WZ is designed with high flow characteristics for ease of filling thin wall parts.

High Antistat. TOTAL Polypropylene 3721WZ is engineered with a high level of antistat for shelf cleanliness and mold release.

FDA. TOTAL Polypropylene 3721WZ complies with all applicable FDA regulations for food contact applications.

Nucleation. TOTAL Polypropylene 3721WZ is nucleated to provide fast cycle time and improve contact clarity in thin wall, multi-cavity molds.

Recommended Applications. TOTAL Polypropylene 3721WZ is ideal for caps, closures, cutlery, and other thin wall multi-cavity applications.

Processing. TOTAL Polypropylene 3721WZ resin processes on conventional injection molding equipment with typical melt temperatures of 390°-450°F (200-232°C). Call the nearest TOTAL Polypropylene Sales Office for additional information.

<u>Resin Properties⁽¹⁾</u>	<u>Typical Value</u>	<u>ASTM Method</u>
Melt Flow, g/10 min.	20	D-1238 Condition "L"
Density, g/cc	0.905	D-1505
Melt Point, °F (°C)	316 (158)	DSC ⁽²⁾
<u>Mechanical Properties⁽¹⁾</u>		
Tensile Strength, psi (M Pa)	5,500 (37.9)	D-638
Elongation, %	12	D-638
Tensile Modulus, psi (M Pa)	260,000 (1,790)	D-638
Flexural Modulus, psi (M Pa)	255,000 (1,760)	D-790
Izod Impact, @ 73°F		D-256A
Notched - ft.-lb./in. (J/m)	0.5 (26.7)	
Unnotched - ft.-lb./in. (J/m)	20.0 (1,065)	
Hardness		
Rockwell R	107	D-785A
<u>Thermal Properties⁽¹⁾</u>		
Heat Deflection		D-648
°F at 66 psi	260	
°C at 4.64 kg/cm ²	127	

(1) Data developed under laboratory conditions and are not to be used as specification, maxima or minima.
 (2) MP determined with a DSC-2 Differential Scanning Calorimeter. Test procedure available upon request.

3721WZ 10/04

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All tests were run under laboratory conditions. ASTM (where applicable) testing procedures. The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. The use of TOTAL products must be guided by the users own methods for selection of proper formulation. TOTAL PETROCHEMICALS USA, INC. disclaims any responsibility for misuse or misapplication of its products. TOTAL MAKES NO WARRANTY OF MERCHANTABILITY AND THERE IS NO WARRANTY THAT GOODS SUPPLIED SHALL BE FIT FOR ANY PARTICULAR PURPOSE. TOTAL'S liability and customer's exclusive remedy for any claims arising out of sale of its products are expressly limited at customer option to replacement of non-performing goods or payment not to exceed the purchase price plus transportation charges thereon in respect to any material which damage is claimed.

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TOTAL



PRODUCT INFORMATION

Colortech 20502-18 FDA Black

Colortech 20502-18 FDA Black is a premium quality carbon black concentrate designed primarily for use in extruded, molded and thermoformed single-service food packaging applications. It is also suitable for use in a wide variety of standard polyolefin applications including blown and cast film, extrusion coating, profile extrusion, injection molding and blow molding.

Colortech 20502-18 FDA Black has been formulated using a high purity carbon black pigment manufactured in North America using a furnace-black process. Unlike gas-fired channel process blacks, this grade is extremely clean and offers excellent batch-to-batch quality, consistent dispersion properties, medium jetness and a moderate blue undertone. The carrier resin used in the formulation of Colortech 20502-18 FDA Black is a 20 melt index linear low density polyethylene.

High Purity Carbon Black Concentration	-	40%
Total Resin Concentration	-	60%
High Load Melt Index	-	17.9 g/10min (190°C/10.0kg)
Nominal Pellet Size	-	40.0 pellets/g
Nominal Bulk Density	-	45.0 lbs/ft ³
Specific Gravity	-	1.15
Max. Recommended Operating Temp.	-	260°C/500°F

The carbon black used in the manufacture of Colortech 20502-18 FDA Black has been determined to be suitable for use in single service plastic food packaging applications at concentrate levels not exceeding 6.25% (ie. carbon black loadings of 2.5% or less) based on the U.S. Food and Drug Administration (FDA). All other components conform to specifications contained in 21 CFR Section 177.1520(c)3.1.

This product does not contain diarylide or pyrazolone pigments and is considered to be heavy metal-free. Trace heavy metal levels comply with current CONEG guidelines (total lead, mercury, cadmium and hexavalent chromium concentration less than 100 ppm).

Please note that some of these specifications are provisional, and are subject to change without notice. However, these changes will be due solely as a reflection of greater production history (i.e. larger statistical sampling), rather than a change in the formulation or final performance of the product.

IMPORTANT – The following supersedes buyer's documents. The information provided is based on Colortech test data or knowledge which is, to the best of our ability, believed to be a true & accurate representation of the product. ***This data shall, in no event, be held to constitute or imply any warranty, guarantee of performance, express or implied commitment of merchantability or fitness of use for a particular purpose, by Colortech.*** Our formal specifications define the limit of Colortech's commitment. Because use conditions and applicable laws may differ by location and may change with time, customer is responsible for determining whether products and the information herein are appropriate for customer's use. Furthermore, no liability whatsoever will be accepted by Colortech with regard to the customer's workplace handling, processing, product use or application, and disposal practices which in all cases must be conducted in compliance with applicable laws and other governmental enactments.

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS: This product has not been tested for, and is therefore not recommended for (a) any application for which there will be contact with human mucous membranes, abraded skin or tissue, or internal body fluids or tissues, for any length of time, (b) any uses where implantation within the human body is intended, and (c) any application involving female pregnancy or specifically intended to promote or interfere with human reproduction.

Rev.2 11/05
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Illing Part#

3660BPET

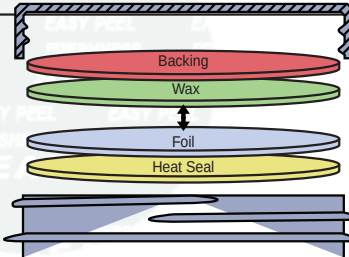


Freshness and Protection
for Today's Packaging

FoilSeal™ Data Sheet

.020" Pulp FS 3-25

Revision: FS325-06032010

Product	.020" Pulp FS 3-25		
Scope	Two piece pulp backed heat induction foil innerseal will provide an aggressive bond with clean peel removal from PET and PVC containers. (.0005" foil version of FS 3-19). Easy access / "puncture foil" when wax bonded to pulp.		
Composition	Material	Standard	Metric
	Backing	.020"	.508 mm
	Wax	-	-
	Foil	.0005"	.0127mm
	Heat Seal	.0005"	.0127mm
			
Composition does not include adhesive, resin or wax bonding layers (if any).			
FDA Status:	21 CFR 177.1210	Recommended Storage and Handling:	
Drug Master File (DFM):	#4544	Canadian DMF:	EU / EP Reg.:
GTR Oxygen:	Essentially Zero	MVTR:	Essentially Zero
Print Location (if any):	Foil Layer and/or Heat Seal Layer		

Selig materials are compliant with current USFDA Food allergen Guidelines.

Selig materials are compliant with California Proposition 65 labeling requirements.

Selig materials are compliant with limitation of heavy metals in packaging per CONEG & EU 94/62/EC, article 11.

MSDS's are not required as Selig is not a chemical manufacturer or distributor and our products are 'articles' intended for food packaging per 29 CFR 1910.1200 (HazCom).

The information contained within this product data bulletin is to be used as a general guide in determining which structures are offered for sealing to specific container materials. All of the information which we provide is reliable to the best of our knowledge, but the accuracy thereof is not guaranteed. We suggest that consumers determine suitability for their own application.

www.seligsealing.com

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