

F-EN-007 Customer Data Sheet Revision 03

CDS - 8074

Extruded high impact polystyrene (HIPS)

General Information

Extruded high impact polystyrene (HIPS) with low gloss. Available in black, white, tan. Thickness available at 3 - 23 mil

Density1.04g/cm³ASTM - D792Gloss (60°, chrome/matte)12/8GUASTM - D2457Durometer Hardness -2.5-ASTM - D2240Type A (Shore A)	Physical Properties				
Durometer Hardness - Type A (Shore A) Durometer Hardness - Type D (Shore D)2.5-ASTM - D2240Mechanical Properties Tensile Strength at Break (MD/TD)3270/3225 TO5/72psiASTM - D882Elongation at Break (MD/TD) To5/72105/72%ASTM - D882Melting Temperature Glass Transition Temperature211°CISO - 3146Glass Transition Temperature Vicat Softening Temperature100°CASTM - D1525Melt Mass-Flow Rate (MFR) 2 years from date of manufacture3.0g/10 minASTM - D1238Stelf Life 2 years from date of manufactureJean date of manufacture	Density	1.04	g/cm³	ASTM - D792	
Type A (Shore A) Durometer Hardness -8.5-ASTM - D2240Type D (Shore D)Mechanical PropertiesTensile Strength at Break3270/3225psiASTM - D882(MD/TD)105/72%ASTM - D882Elongation at Break (MD/TD)105/72%ASTM - D882Thermal PropertiesMelting Temperature211°CISO - 3146Glass Transition Temperature99°CASTM - E1356Vicat Softening Temperature100°CASTM - D1525Melt Mass-Flow Rate (MFR)3.0g/10 minASTM - D1238(200°C/5kg)Shelf Life2 years from date of manufactureFechnical Information Notes	Gloss (60°, chrome/matte)	12/8	GU	ASTM - D2457	
Durometer Hardness - 8.5 - ASTM - D2240 Type D (Shore D) Mechanical Properties Tensile Strength at Break 3270/3225 psi ASTM - D882 (MD/TD) 105/72 % ASTM - D882 Elongation at Break (MD/TD) 105/72 % ASTM - D882 Thermal Properties % ASTM - D882 Vicat Softening Temperature 99 °C ASTM - E1356 Vicat Softening Temperature 100 °C ASTM - D1525 Melt Mass-Flow Rate (MFR) 3.0 g/10 min ASTM - D1238 (200°C/Skg) Shelf Life 2 years from date of manufacture ISO	Durometer Hardness -	2.5	-	ASTM - D2240	
Type D (Shore D)Mechanical PropertiesTensile Strength at Break3270/3225psiASTM - D882(MD/TD)105/72%ASTM - D882Elongation at Break (MD/TD)105/72%ASTM - D882Thermal PropertiesMelting Temperature211°CISO - 3146Glass Transition Temperature99°CASTM - E1356Vicat Softening Temperature100°CASTM - D1525Melt Mass-Flow Rate (MFR)3.0g/10 minASTM - D1238(200°C/5kg) </td <td>Type A (Shore A)</td> <td></td> <td></td> <td></td>	Type A (Shore A)				
Mechanical PropertiesTensile Strength at Break3270/3225psiASTM - D882(MD/TD)105/72%ASTM - D882Elongation at Break (MD/TD)105/72%ASTM - D882Thermal Properties%ASTM - D882Melting Temperature211°CISO - 3146Glass Transition Temperature99°CASTM - E1356Vicat Softening Temperature100°CASTM - D1525Melt Mass-Flow Rate (MFR)3.0g/10 minASTM - D1238(200°C/5kg)Shelf Life2 years from date of manufacture Technical Information Notes	Durometer Hardness -	8.5	-	ASTM - D2240	
Tensile Strength at Break3270/3225psiASTM - D882(MD/TD)105/72%ASTM - D882Elongation at Break (MD/TD)105/72%ASTM - D882Thermal Properties211°CISO - 3146Glass Transition Temperature99°CASTM - E1356Vicat Softening Temperature100°CASTM - D1525Melt Mass-Flow Rate (MFR)3.0g/10 minASTM - D1238(200°C/5kg)Shelf Life2 years from date of manufactureTechnical Information Notes	Type D (Shore D)				
(MD/TD) Elongation at Break (MD/TD)105/72%ASTM - D882Thermal Properties*********************************	Mechanical Properties				
Elongation at Break (MD/TD)105/72%ASTM - D882Thermal PropertiesMelting Temperature211°CISO - 3146Glass Transition Temperature99°CASTM - E1356Vicat Softening Temperature100°CASTM - D1525Melt Mass-Flow Rate (MFR)3.0g/10 minASTM - D1238(200°C/5kg)Shelf Life2 years from date of manufactureJensition NotesTechnical Information Notes	Tensile Strength at Break	3270/3225	psi	ASTM - D882	
Thermal PropertiesMelting Temperature211°CISO - 3146Glass Transition Temperature99°CASTM - E1356Vicat Softening Temperature100°CASTM - D1525Melt Mass-Flow Rate (MFR)3.0g/10 minASTM - D1238(200°C/5kg)Shelf Life2 years from date of manufactureFechnical Information Notes	(MD/TD)				
Melting Temperature211°CISO - 3146Glass Transition Temperature99°CASTM - E1356Vicat Softening Temperature100°CASTM - D1525Melt Mass-Flow Rate (MFR)3.0g/10 minASTM - D1238(200°C/5kg)EShelf Life2 years from date of manufactureETechnical Information Notes	Elongation at Break (MD/TD)	105/72	%	ASTM - D882	
Glass Transition Temperature99°CASTM - E1356Vicat Softening Temperature100°CASTM - D1525Melt Mass-Flow Rate (MFR)3.0g/10 minASTM - D1238(200°C/5kg)Shelf Life2 years from date of manufactureFlow Rate (MFR)Technical Information Notes	Thermal Properties				
Vicat Softening Temperature100°CASTM - D1525Melt Mass-Flow Rate (MFR)3.0g/10 minASTM - D1238(200°C/5kg)Shelf Life2 years from date of manufactureTechnical Information Notes	Melting Temperature	211	°C	ISO - 3146	
Melt Mass-Flow Rate (MFR) 3.0 g/10 min ASTM - D1238 (200°C/5kg) Shelf Life 2 years from date of manufacture Technical Information Notes	Glass Transition Temperature	99	°C	ASTM - E1356	
(200°C/5kg) Shelf Life 2 years from date of manufacture Technical Information Notes	Vicat Softening Temperature	100	°C	ASTM - D1525	
Shelf Life 2 years from date of manufacture Technical Information Notes	Melt Mass-Flow Rate (MFR)	3.0	g/10 min	ASTM - D1238	
2 years from date of manufacture Technical Information Notes	(200°C/5kg)				
Technical Information Notes	Shelf Life				
	2 years from date of manufacture				
Data based on film of 15 mil thickness	Technical Information Notes				

Original Issue Date- 2/26/2020 Approval Date- 2/26/2020 Revision- A

Listed Values:

The above values are typical property values not to be construed as specification limits.

CLAIMS, WARRANTIES, AND LIMITATIONS OF LIABILITY:

(a) Buyer waivers at claims relating to the goods unless received in writing by Seller within thirty (30) days of receipt of the goods. No goods shall be returned by Buyer for any reason without Seller's written approval

(b) ALL WARRANTIES RELATING TO THE DESCRIBED GOODS ARE EXPRESSED IN THIS PARAGRAPH (5b). SELLER MAKES NO WARRANTY, EXPRESS, IMPLIED OR STATUTORY WITH RESPECT TO THE GOODS AND SELLS THEM AS IS EXCEPT THAT SELLER WILL BE RESPONSIBLE, TO BUYER ONLY, FOR FAULTY WORKMANSHIP AND USE OF IMPERFECT MATERIALS

(c) SELLER SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES TO BUYER OR ANY OTHER PERSON WHERE THE GOODS ARE NOT WAREHOUSED, HANDLED OR USED IN ACCORDANCE WITH PROPER AND CUSTOMARY PRACTICES OF THE TRADE.

(d) BUYER'S EXCLUSIVE REMEDY AND SELLER'S SOLE LIABILITY ON ANY CLAIM, WHETHER TORT, CONTRACT, OR WARRANTY, SHALL BE LIMITED TO REPLACEMENT OF THE DEFECTIVE GOODS OR, AT SELLER'S OPTION, TO REIMBURSEMENT OF BUYER'S ACTUAL COST OF THE GOODS NOT SO REPLACED AND IN NO EVENT SHALL SELLER BE LIABLE FOR INDEMNIFICATION OF BUYER ON ACCOUNT OF ANY CLAIM ASSERTED AGAINST BUYER FOR ANY OTHER OR FURTHER DAMAGES OF ANY KIND WHATSOEVER, WHETHER DIRECT OR INDIRECT.

(e) Buyer may not bring any action arising hereunder unless such action is commenced within one (1) year after the cause of action has accrued.

LIMITATION OF LIABILITY:

Except for the limited remedy stated above, and except to the extent prohibited by law, Plitek will not be liable for any loss or damage arising from or related to the Plitek product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business

opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Trademarks:

Plitek is a trademark of Plitek, L.L.C