Product Information

Ultramid® 8253 HS
Polyamide 6

BASF
The Chemical Company

Product Description

This resin is a heat stabilized, impact modified type 6 graft copolymer developed for both injection molding and extrusion applications requiring improved dry as molded toughness and increased flexibility. It is also available in non-heat stabilized (Ultramid 8253) and/or pigmented versions.

Applications

Ultramid 8253 HS is generally recommended for applications such as plugs, receptacles, flexible connector covers, weed trimmer components, clips, fasteners, flanges, key housings as well as many flexible tubing applications.

PHYSICAL	ISO Test Method	Property Value	
Density, g/cm	1183	1.09	
Moisture, %	62		
(24 Hour)		1.5	
(50% RH)		2.3	
(Saturation)		8.1	
MECHANICAL	**ISO Test Method**	**Dry**	**Conditioned**
Tensile Modulus, MPa	527		
-40C		2,835	3,300
23C		2,300	730
80C		400	370
121C		295	220
Tensile stress at yield, MPa	527		
-40C		117	116
23C		60	32
80C		25	20
121C		20	-
Tensile stress at break, MPa	527		
Tensile strain at yield, %	527		
23C		4	15
Nominal strain at break, %	527		
23C		40	>50
Flexural Strength, MPa	178		
23C		65	-
Flexural Modulus, MPa	178		
23C		1,900	-
IMPACT	**ISO Test Method**	**Dry**	**Conditioned**
Charpy Notched, kJ/m^2	179		
23C		18	-
-30C		5	-
Charpy Unnotched, kJ/m^2	179		
23C		N	-
THERMAL	**ISO Test Method**	**Dry**	**Conditioned**

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Melting Point, C	3146	220	-
HDT A, C	75	55	-
Coef. of Linear Thermal Expansion, Parallel, mm/mm C		0.88 X10-4	-
Coef. of Linear Thermal Expansion, Normal, mm/mm C		0.93 X10-4	-
ELECTRICAL	**ISO Test Method**	**Dry**	**Conditioned**
Comparative Tracking Index	IEC 60112	600	-
Volume Resistivity	IEC 60093	>1E13	-
UL RATINGS	**UL Test Method**	**Property Value**	
Flammability Rating, 1.5mm	UL94	HB	
Relative Temperature Index, 1.5mm	UL746B		
Mechanical w/o Impact, C		105	
Mechanical w/ Impact, C		105	
Electrical, C		105	