Product Information

Ultramid® 8254 HS BK-102
Polyamide 6

BASF
The Chemical Company

Product Description

Ultramid 8254 HS BK-102 is a highly flexible, heat stabilized, pigmented black, impact modified PA6 extrusion compound for tubing application.

Applications

Ultramid 8254 HS BK-102 is generally recommended for applications such as convoluted and emission tubing, cable jacketing and other types of automotive tubing.

PHYSICAL	ASTM Test Method	Property Value	
Specific Gravity	D-792	1.07	
Mold Shrinkage (1/8" bar, in/in)		0.013	
Moisture, %	D-570		
(24 Hour)		1.2	
(50% RH)		2	
(Saturation)		7.1	
MECHANICAL	**ASTM Test Method**	**Dry**	**Conditioned**
Tensile Strength, Yield, MPa (psi)	D-638		
-40C (-40F)		83 (12,000)	104 (15,100)
23C (73F)		34 (4,930)	26 (3,770)
80C (176F)		15 (2,170)	-
121C (250F)		12 (1,740)	-
Elongation, Yield, %	D-638		
23C (73F)		30	-
Elongation, Break, %	D-638		
23C (73F)		>100	-
Flexural Modulus, MPa (psi)	D-790		
23C (73F)		610 (88,400)	-
Flexural Strength, MPa (psi)	D-790		
23C (73F)		28 (4,060)	-
Rockwell Hardness, R Scale	D-785	40	-
IMPACT	**ASTM Test Method**	**Dry**	**Conditioned**
Notched Izod Impact, J/M (ft-lbs/in)	D-256		
23C (73F)		640 (12.0)	-
THERMAL	**ASTM Test Method**	**Dry**	**Conditioned**
Melting Point, C(F)	D-3418	220 (428)	-
Heat Deflection @ 264 psi (1.8 MPa) C(F)	D-648	47 (116)	-
Heat Deflection @ 66 psi (.45 MPa) C(F)	D-648	124 (255)	-
Coef. of Linear Thermal Expansion, mm/mm C (in/in F)	E-831	1.17 X10-4	-
UL RATINGS	**UL Test Method**	**Property Value**	
Flammability Rating, 1.5mm	UL94	HB	
Relative Temperature Index, 1.5mm	UL746B		
Mechanical w/o Impact, C		65	

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Mechanical w/ Impact, C		65	
Electrical, C		65	
ELECTRICAL	**ASTM Test Method**	**Dry**	**Conditioned**
Volume Resistivity, 1.5 mm	D-257	>1E13	-

Processing Guidelines

Material Handling
Max. Water content: 0.1%
Product is supplied in sealed containers and drying prior to molding is not required. If drying becomes necessary, a dehumidifying or desiccant dryer operating at 65 degC (149 degF) is recommended. Drying time is dependent on moisture level, but 2-4 hours is generally sufficient. Further information concerning safe handling procedures can be obtained from the Material Safety Data Sheet. Alternatively, please contact your BASF representative.

Typical Profile
Melt Temperature 240-250 degC (464-482 degF)

Typical Barrel Profile (degC):

Rear 245-255 degC (473-491 degF)
Middle 245-260 degC (473-500 degF)
Front 240-250 degC (464-482 degF)

Head 230-245 degC (446-473 degF)
Flange 230-245 degC (446-473 degF)
Die 230-245 degC (446-473 degF)

Screw Parameters

Metering Section	40%
Transition Section	3 to 4 flights
Feed Section	balance of screw length
Compression Ratio	3.5:1 to 4.0:1
L/D Ratio	20:1 to 24:1