

Zythane® 7090A-FH

Alliance Polymers & Services - Thermoplastic Polyurethane Elastomer (Polyether)

General Information

Product Description

Zythane 7090A-FH is a polyether-based TPU specifically formulated for firehose extrusion application with ease of processing & post hose separation capability. It exhibits excellent abrasion resistance and toughness and has good hydrolytic stability, oil, fuel and solvent resistance. It is supplied uncolored in pellet form

Typical Applications:

Zythane 7090A-FH applications include among others FDA applications, cable sheathing, spiral and pneumatic tubing, film, irrigation hoses, conveyor hoses, fire hoses, hydraulic hoses, cable jacketing, flat flex cables, automotive sensor cables

General

Features	<ul style="list-style-type: none"> • Abrasion Resistant • Fuel Resistant • Good Processability 	<ul style="list-style-type: none"> • Good Toughness • Halogen Free • Hydrolytically Stable 	<ul style="list-style-type: none"> • Oil Resistant • Solvent Resistant
Uses	<ul style="list-style-type: none"> • Automotive Applications • Cable Jacketing 	<ul style="list-style-type: none"> • Film • Hose 	<ul style="list-style-type: none"> • Irrigation Applications • Tubing
Forms	<ul style="list-style-type: none"> • Pellets 		
Processing Method	<ul style="list-style-type: none"> • Extrusion 		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.13		ASTM D792
Mechanical	Nominal Value	Unit	Test Method
Taber Abrasion Resistance	40.0	mg	ASTM D1044
Abrasion - DIN	20	mm ³	DIN 53516
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (100% Strain)	1160	psi	ASTM D412
Tensile Stress (300% Strain)	2180	psi	ASTM D412
Tensile Strength (Break)	5660	psi	ASTM D412
Tensile Elongation (Break)	460	%	ASTM D412
Tear Strength ²	771	lbf/in	ASTM D624
Compression Set			ASTM D395B
73°F, 22 hr	23	%	
158°F, 72 hr	41	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A	90		
Shore D	40		
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	-34.6	°F	DSC
Vicat Softening Temperature	257	°F	ASTM D1525
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.04 in		HB	
0.06 in		HB	
0.12 in		HB	