# Zythane® 6070AU

### Thermoplastic Polyurethane Elastomer (Polyether)

#### Alliance Polymers & Services

#### Message:

Zythane 6070AU is a translucentUV--stabilized polyether--based TPU specifically formulated for injection molding applications. It exhibits excellent abrasion resistance and toughness and has good hydrolytic/UV stability, oil, fuel and solvent resistance. It is supplied uncolored in pellet form. Typical Applications:

Zythane 6070AU applications include among others FDA applications, sports shoes, ski tips, other sporting goods, casters, power tools handles, good overmolded adhesion to certain EP (ex: PC, ABS, PMMA), cell phone cases, plugs, terminations, ski boot shell, animal tags, railroad pads.

General Information			
Additive	UV stabilizer		
Features	Solvent resistance		
	Good UV resistance		
	Good wear resistance		
	Fuel resistance		
	Oil resistance		
	Good toughness		
	Hydrolysis stability		
Uses	Wheels		
	Power/other tools		
	Industrial application		
	Mobile phone		
	Sporting goods		
	Footwear		
Agency Ratings	FDA not rated		
Appearance	Translucent		
	Colorless		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.06	g/cm³	ASTM D792
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore A)	70		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Taber Abrasion Resistance	35.0	mg	ASTM D1044
Abrasion - DIN	28	mm³	DIN 53516
Elastomers	Nominal Value	Unit	Test Method

Tensile Stress			ASTM D412
100% strain	12.0	MPa	ASTM D412
300% strain	18.0	MPa	ASTM D412
Tensile Strength (Break)	25.0	MPa	ASTM D412
Tensile Elongation (Break)	1000	%	ASTM D412
Tear Strength <sup>1</sup>	44.1	kN/m	ASTM D624
Compression Set			ASTM D395B
24°C, 22 hr	12	%	ASTM D395B
70°C, 72 hr	30	%	ASTM D395B
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	-55.0	°C	DSC
Vicat Softening Temperature	75.0	°C	ASTM D1525
Flammability	Nominal Value		Test Method
Flame Rating			UL 94
1.00 mm	НВ		UL 94
1.50 mm	НВ		UL 94
3.00 mm	НВ		UL 94
Injection	Nominal Value	Unit	
Drying Temperature	85.0	°C	
Drying Time	4.0	hr	
Rear Temperature	165	°C	
Middle Temperature	180	°C	
Front Temperature	195	°C	
Nozzle Temperature	195 - 200	°C	
Processing (Melt) Temp	190 - 195	°C	
Mold Temperature	25.0 - 60.0	°C	
Back Pressure	0.500 - 1.00	MPa	
Screw Speed	60 - 200	rpm	
Clamp Tonnage	4.1 - 6.9	kN/cm <sup>2</sup>	
Injection instructions			
Injection Speed: >.4 in/sec			
NOTE			
1.	C mould		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519 Phone: +86 13424755533 Email: sales@su-jiao.com No. 215, Lianhe North Road, Fengxian District, Shanghai, China

