# OnFlex<sup>™</sup> U 5370A-E0077

#### Thermoplastic Elastomer

#### PolyOne Corporation

General Information

#### Message:

OnFlex<sup>TM</sup> U thermoplastic elastomer compounds are based on thermoplastic polyurethane elastomers (TPE-U). The OnFlex<sup>TM</sup> U 5300 series are based upon alloys of SEBS and TPU, combining the advantages of both raw materials, for example the good processability and soft haptic of a TPE-S with the excellent mechanical properties and abrasion resistance of a TPE-U. OnFlex<sup>TM</sup> U 5300 compounds are formulated to deliver very good scratch resistance, a wide hardness range and good chemical resistance.

Features	Good wear resistance			
	Scratch resistance			
	Oil resistance			
Uses	Power/other tools			
	Industrial application			
	Application in Automobile Field			
	General			
	Consumer goods application field			
RoHS Compliance	RoHS compliance			
Appearance	Rough surface polishing			
Forms	Particle			
Processing Method	Film extrusion			
	Calendering			
	Injection molding			
	injection molaring			
	injection molding			
Physical	Nominal Value	Unit	Test Method	
Physical Density		Unit g/cm³	Test Method ISO 1183	
Density	Nominal Value			
Density Hardness	Nominal Value	g/cm³	ISO 1183	
Density Hardness Durometer Hardness (Shore A)	Nominal Value 1.08  Nominal Value	g/cm³	ISO 1183 Test Method	
Density Hardness Durometer Hardness (Shore A) Mechanical	Nominal Value  1.08  Nominal Value  70	g/cm³ Unit	ISO 1183 Test Method ISO 868	
Density  Hardness  Durometer Hardness (Shore A)  Mechanical  Abrasion Loss	Nominal Value  1.08  Nominal Value  70  Nominal Value	g/cm³ Unit Unit	ISO 1183  Test Method  ISO 868  Test Method	
	Nominal Value 1.08 Nominal Value 70 Nominal Value 35.0	g/cm³ Unit Unit mm³	ISO 1183  Test Method  ISO 868  Test Method  DIN 53516	
Density Hardness  Durometer Hardness (Shore A)  Mechanical  Abrasion Loss  Fogging (100°C)  Odor rating	Nominal Value  1.08  Nominal Value  70  Nominal Value  35.0  1.1	g/cm³ Unit Unit mm³ mg	ISO 1183  Test Method  ISO 868  Test Method  DIN 53516  DIN 75201B	
Density Hardness  Durometer Hardness (Shore A)  Mechanical  Abrasion Loss  Fogging (100°C)  Odor rating  General Material Type	Nominal Value  1.08  Nominal Value  70  Nominal Value  35.0  1.1  2.10	g/cm³ Unit Unit mm³ mg	ISO 1183  Test Method  ISO 868  Test Method  DIN 53516  DIN 75201B	
Density  Hardness  Durometer Hardness (Shore A)  Mechanical  Abrasion Loss  Fogging (100°C)	Nominal Value  1.08  Nominal Value  70  Nominal Value  35.0  1.1  2.10  Thermoplastic polyurethane e	g/cm³ Unit Unit mm³ mg	ISO 1183  Test Method  ISO 868  Test Method  DIN 53516  DIN 75201B  VDA 270	
Density Hardness  Durometer Hardness (Shore A)  Mechanical  Abrasion Loss  Fogging (100°C)  Odor rating  General Material Type  Elastomers	Nominal Value  1.08  Nominal Value  70  Nominal Value  35.0  1.1  2.10  Thermoplastic polyurethane e	g/cm³ Unit Unit mm³ mg	ISO 1183  Test Method  ISO 868  Test Method  DIN 53516  DIN 75201B  VDA 270  Test Method	
Density  Hardness  Durometer Hardness (Shore A)  Mechanical  Abrasion Loss  Fogging (100°C)  Odor rating  General Material Type  Elastomers  Tensile Stress <sup>1</sup>	Nominal Value  1.08  Nominal Value  70  Nominal Value  35.0  1.1  2.10  Thermoplastic polyurethane e  Nominal Value	g/cm³ Unit Unit mm³ mg  llastomer (TPU) Unit	ISO 1183  Test Method ISO 868  Test Method DIN 53516 DIN 75201B VDA 270  Test Method ISO 37	

Lateral flow: fracture, 23°C, 2.00mm	570	%	ISO 37
Traffic: fracture, 23°C, 2.00mm	580	%	ISO 37
Tear Strength <sup>3</sup>			ISO 34-1
Lateral flow: 23°C, 2.00mm	47	kN/m	ISO 34-1
Traffic: 23°C, 2.00mm	53	kN/m	ISO 34-1
Optical	Nominal Value		Test Method
Gloss (60°)	6		ISO 2813
Additional Information	Nominal Value		Test Method
各项属性值是采用注射模制基板测量得出.			
Injection	Nominal Value	Unit	
Drying Temperature	100	°C	
Drying Time	2.0	hr	
Processing (Melt) Temp	170 - 210	°C	
Mold Temperature	30.0 - 60.0	°C	
Injection Rate	Slow		
NOTE			
1.	Type 2, 200mm/min		
2.	Type 2, 200mm/min		
3.	Method A, pants-shaped sample, 500 mm/min		

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### Recommended distributors for this material

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