

Dow Pellethane® 2102-85A Polyurethane Elastomer, Polyester Polycaprolactone Based (discontinued **)

Category : Polymer , Thermoplastic , Elastomer, TPE , Polyurethane, TP , Thermoplastic Polyurethane, Elastomer, Polyester Grade

Material Notes:

PELLETHANE® 2102-85A elastomer is a polyester polycaprolactone based polyurethane elastomer which combines excellent resistance to fuels and oils with enhanced UV stability and good hydrolytic stability compared to other polyester based TPUs. Its typical applications include, seals, gaskets, belting, animal ID tags and other fabricated products. Data provided by Dow Chemical. Lubrizol acquired the Pellethane product line from Dow in 2009.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Dow-Pellethane-2102-85A-Polyurethane-Elastomer-Polyester-Polycaprolactone-Based-nbspdiscontinued-.php

Physical Properties	Metric	English	Comments
Density	1.18 g/cc	0.0426 lb/in ³	
Linear Mold Shrinkage	0.0050 - 0.0060 cm/cm @Thickness 1.59 mm	0.0050 - 0.0060 in/in @Thickness 0.0625 in	plaque
Linear Mold Shrinkage, Transverse	0.0050 - 0.0060 cm/cm @Thickness 1.59 mm	0.0050 - 0.0060 in/in @Thickness 0.0625 in	plaque
Melt Flow	35 g/10 min @Load 1.20 kg, Temperature 224 °C	35 g/10 min @Load 2.65 lb, Temperature 435 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	82 - 90	82 - 90	ASTM D2240
Tensile Strength at Break	40.3 MPa	5850 psi	Tensile stress at break.
Elongation at Break	525 %	525 %	
50% Modulus	0.00586 GPa	0.850 ksi	
100% Modulus	0.00724 GPa	1.05 ksi	
300% Modulus	0.0152 GPa	2.20 ksi	
Tear Strength	91.1 kN/m	520 pli	
Taber Abrasion, mg/1000 Cycles	50	50	H22 Wheel
Compression Set	25 %	25 %	23°C.
	30 %	30 %	

Mechanical Properties	@Temperature 70.0 °C Metric	@Temperature 158 °F English	Comments
Tensile Set	50 %	50 %	Elongation set after break

Thermal Properties	Metric	English	Comments
CTE, linear	153 µm/m-°C	85.0 µin/in-°F	
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Vicat Softening Point	92.0 °C	198 °F	
Glass Transition Temp, Tg	-37.0 °C	-34.6 °F	
Clash Berg Stiffness Temperature	-40.0 °C	-40.0 °F	

Processing Properties	Metric	English	Comments
Melt Temperature	199 - 210 °C	390 - 410 °F	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China