

## TSE Industries Millathane® HT High Temperature-Resistant Millable Polyester Polyurethane with 1.0 PHR DBPH-50

Category: Polymer, Thermoset, Polyester, TS, Polyurethane, TS, Thermoset Polyurethane, Elastomer, Unreinforced, Rubber or Thermoset Elastomer (TSE)

## **Material Notes:**

MILLATHANE HT is a polyester millable polyurethane which has the ability to withstand elevated temperatures. Polyurethanes have been known for their excellent resistance to abrasion, impact, tear strength, oil and fuel resistance, and ozone resistance. The life expectancy of urethane is often 5 times longer than other elastomers, thus saving material costs and downtime expense. One shortcoming of polyurethanes is loss of physical properties at temperatures over 180°F (82°C). MILLATHANE HT has overcome this weakness.MILLATHANE® HT compounds need only three ingredients when curing with peroxide: MILLATHANE HT, stearic acid and peroxide. However, reinforcing fillers are necessary. Because without them, the tensile, elongation and tear properties of MILLATHANE HT compounds do not attain their maximum values. In comparison with sulfur cures, peroxide-cured compounds have superior compression set, faster cure times and better heat resistance. However, sulfur-cured compounds exhibit higher tensile and elongation characteristics. Formulation Millathane HT 100.0Stearic Acid0.5N-550 Black35.0TP-955.0Vanfre AP21.0Poly AC617A1Varox DBPH-501.0All information provided by TSE Industries

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_TSE-Industries-Millathane-HT-High-Temperature-Resistant-Millable-Polyester-Polyurethane-with-10-PHR-DBPH-50.php

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	75	75	
Tensile Strength, Yield	13.9 MPa	2020 psi	
Elongation at Yield	300 %	300 %	
100% Modulus	0.00417 GPa	0.605 ksi	
200% Modulus	0.01059 GPa	1.536 ksi	
300% Modulus	0.01326 GPa	1.923 ksi	
Tear Strength	26.6 kN/m	152 pli	Die C
	20.7 %	20.7 %	
Compression Set	@Temperature 70.0 °C, Time 79200 sec	@Temperature 158 °F, Time 22.0 hour	

Processing Properties	Metric	English	Comments
Cure Time	5.00 min	0.0833 hour	
	@Temperature 177 °C	@Temperature 350 °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