

## Northstar Polymers MPS-F06B Hand-Mixable Flexible Foam

Category: Polymer, Thermoset, Polyurethane, TS, Thermoset Polyurethane Foam, Unreinforced

## **Material Notes:**

This foam formulation is designed to make molded flexible foam parts/sheets/dies/blocks by hand-mixing or by the meter dispensing equipment. The components are stable liquid at room temperature and ambient pressure. It requires minimum tooling for a small production or short runs. These properties are ideal in small scale productions for custom foam applications such as custom seating, padding, and cushioning. Generally, lower density grade foams are softer than higher density foams. For firmer foam quality, 8 pound-percubic foot formula MPS-F08A or firm-flexible grade foam formula FFM-1 is recommended. The free-rise density of the foam is 5.5 pounds per cubic foot, and the cell structure is designed to be open-cell. This is an MDI base water-blown polyester/polyether hybrid system, and it does not use flammable or ozone-layer-depleting auxiliary blowing agents Examples for Applications: Molded Upholstery Parts Custom Seating, Padding, and Cushioning Parts Custom Packaging of Impact/Vibration-Sensitive Items Prototyping Information provided by Northstar Polymers.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Northstar-Polymers-MPS-F06B-Hand-Mixable-Flexible-Foam.php

Physical Properties	Metric	English	Comments
Density	0.0881 g/cc	0.00318 lb/in <sup>3</sup>	Free Rise Density
	0.0977 g/cc	0.00353 lb/in <sup>3</sup>	Typical Compression Density

Mechanical Properties	Metric	English	Comments
Hardness, Shore 00	28 - 33	28 - 33	
Tensile Strength	0.262 MPa	38.0 psi	
Elongation at Break	121 %	121 %	
Compressive Strength	0.0117 MPa	1.70 psi	
	@Strain 25.0 %	@Strain 25.0 %	
	0.0276 MPa	4.00 psi	
	@Strain 50.0 %	@Strain 50.0 %	
Rebound	28 %	28 %	Bashore Rebound
Tear Strength	0.649 kN/m	3.70 pli	Split Tear Resistance

Processing Properties	Metric	English	Comments
Processing Temperature	21.1 - 32.2 °C	70.0 - 90.0 °F	Prepolymer Temperature
	21.1 - 32.2 °C	70.0 - 90.0 °F	Curing Agent Temperature
Mold Temperature	37.8 - 54.4 °C	100 - 130 °F	



Processing Properties	Metric	English 0.550 - 0.670 hour	Comments
Cure Time			De-mold Time
	@Temperature 43.3 °C	@Temperature 110 °F	
	60.0 min	1.00 hour	Complete Cure Cycle
	@Temperature 82.2 °C	@Temperature 180 °F	
	1440 min	24.0 hour	Complete Cure Cycle
	@Temperature 25.0 °C	@Temperature 77.0 °F	
Pot Life	0.330 min	0.330 min	

Descriptive Properties	Value	Comments
Curing Agent	PPB-027	
Prepolymer	MSA-018	
Weight Ratio	1:1.49	Prepolymer to Curing Agent Ratio

## **Contact Songhan Plastic Technology Co.,Ltd.**

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