

## FOAM N MORE UPHOLSTERY

### POLYSTYRENE (STYROFOAM) - MATERIAL SAFETY DATA SHEET

#### I-PRODUCT INFORMATION

PRODUCT: Polystyrene (Styrofoam) SYNONYMS: EPS, Expanded Polystyrene PRODUCT GRADES: Type I, VIII, II, and IX CHEMICAL FAMILY: Polystyrene Thermoplastic Polymer CAS REGISTRY NO: 9003-53-6 CAS NAME: Benzene, Ethenyl- Homopolymer FORMULA: (C8 H8) <sub>x</sub> TSCA INVENTORY STATUS: Listed	HAZARD RATING: 2= Moderate HEALTH 0 0= Minimal 3= Serious FIRE 2 1= Slight 4= Severe REACTIVITY 0 CONTACT: FOAM N MORE UPHOLSTERY 1177 W. Maple Rd Clawson, MI 48017 (248) 284-0002 www.foamforyou.com
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#### II- INGREDIENTS

<u>HAZARDOUS COMPONENTS:</u>	<u>CAS REGISTRY:</u>	<u>APPROX.WEIGHT PERCENTAGE</u>
Pentane	109-66-0	Less Than 2%
<u>NON-HAZARDOUS COMPONENTS:</u>	<u>CAS REGISTRY NO:</u>	<u>APPROX. WEIGHT PERCENTAGE</u>
Polystyrene	9003-53-6	98% Min.

#### III-PHYSICAL DATA

FORM: Rigid Cellular Foam Blocks, Boards & Shapes COLOR: White ODOR: Very Slight Hydrocarbon Odor BOILING POINT: N/A MELTING POINT: Softens at 175F to 220F SPECIFIC GRAVITY: (Water=1) Density 0.6PCF to 2.0 PCF	VAPOR PRESSURE: N/A VOLATILES BY VOLUME: Less than 4% Pentane & Water VAPOR DENSITY: (AIR =1) N/A EVAPORATION RATE: None SOLUBILITY IN WATER: Insoluble
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#### IV- FIRE & EXPLOSION DATA

FLASHPOINT AND METHOD USED: 610F Min (ASTM D 1929) SPECIAL FIRE FIGHTING INSTRUCTIONS: Use approved Self-continued breathing apparatus respirator & approved Personal Protection Clothing. EXTINGUISHING MEDIA: Water Fog, Carbon Dioxide, Foam And Dry Chemical	AUTOIGNITION TEMPERATURE: 850F Min. UNUSUAL FIRE AND EXPLOSION HAZARDS: May produce dense black smoke. Smoke consists of Carbon (soot) Carbon Monoxide Carbon Dioxide and Water. Dust generated by fabrication i.e., Sanding, Sawing, Etc., will increase fire hazard and should be handled accordingly.
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#### V-REACTIVITY

STABILITY ( CONDITIONS TO AVOID): Stable. Avoid Fire And High Temperatures INCOMPATIBILITY (MATERIALS TO AVOID): Will dissolve in Most organic solvents, and some insecticides, Aldehydes and Amines.	HAZARDOUS DECOMPOSITION: Carbon Monoxide Carbon Dioxide, Carbon, Water, Hydrogen Halide HAZARDOUS POLYMERIZATION: None
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Property	Units	ASTM Test	Type I	Type VIII	Type II	Type IX (In Stock)
Density minimum	(pcf)	D 303 or D 1622	0.90	1.15	1.35	1.80
Density Range			0.90-1.14	1.15-1.34	1.35-1.79	1.80-2.20
Thermal Conductivity	BTU /(hr)	C177 or 518	0.23	0.22	0.21	0.20
K Factor	(sq.ft.) (F/in.)		0.24	0.235	0.22	0.21
			0.26	0.255	0.24	0.23
<b>Strength Properties</b>						
Compression 10% Deformation	Psi	D 1621	10-14	13-18	15-21	25-33
Flexural	Psi	C 203	25-30	30-38	40-50	50-75
Tensile	Psi	D 1623	16-20	17-21	18-22	23-27
Shear	Psi	D 723	18-22	23-25	26-32	33-37
Shear Modulus	Psi		280-320	370-410	460-500	600-640
Modulus of Elasticity	Psi		180-220	250-310	320-360	460-500
<b>Moisture Resistance</b>						
WVT	Perm. In	E 96	2.0-5.0	1.5-3.5	1.0-3.5	0.6-2.0
Absorption	%	C 272	Less than 4.0	Less than 3.0	Less than 3.0	Less than 2.0
Capillarity			None	None	None	None
Coefficient of Thermal Expansion	In./(in.) (F)	D696	0.000035	0.000035	0.000035	0.000035
<b>Maximum Service Temperature</b>						
Long term Exposure	F		167	167	167	167
Intermittent Exposure			180	180	180	180
Oxygen Index	%	D 2863	24.0	24.0	24.0	24.0
<b>Thermal Ristance</b>						
R Value	40F 75F	1* Thickness	4.17 3.85	4.25 3.92	4.55 4.17	4.76 4.35