

Energy Systems, Inc.

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Material Safety Data Sheet

I-Product Information

Product:	CAS Registry No.:
Expanded Polystyrene	9003536
Product Grades:	CSA Name:
Type XI, I, VIII, IX	Ethenylbenzene Homopolymer
	Formula:
Chemical Family:	(C8H8)N
Polystyrene Thermoplastic	TSCA Inventory Status:
	Listed

Hazard Rating:

0= Minimal	3= Serious	Health	0
1= Slight	4= Severe	Fire	2
2= Moderate		Reactivity	0

II – Ingredients

Hazardous Components:	CAS Registry No.:	Approx. Weight Percentage:
Pentane	109660	1%
Halogen Flame Retardants	N/A	.9%
Non Hazardous Components:	CAS Registry No.:	
Polystyrene	9003536	98%

III - Physical Data

Form:	Boiling Point:
Rigid Cellular foam blocks, boards & shapes	N/A
Vapor Pressure:	Vapor Density:
N/A	N/A
Color:	Melting Point:
White	Softens at 175 F to 220 F
Volatiles By Volume:	Evaporation Rate:
<4% (pentane & water)	None
Odor:	Solubility in water:
Very slight hydrocarbon odor	Insoluble
Density:	
.06 pcf to 3.0 pcf	

IV - Fire & Explosion Date

Flash PT and Method Used	Auto Ignition Temperature:
610 F Min. (ASTM D1929)	850 F Minimum
Special Fire Fighting Instructions:	Unusual Fire and Explosion hazard:
Use approved self-contained breathing apparatus respirator And personal protective clothing	May produce dense black smoke. Smoke consists of carbon (soot), carbon monoxide, carbon dioxide and water. Dust generated by fabrication i.e. sawing sanding, ect will increase fire hazard abd should be Handled accordingly.
Extinguishing Media:	
Water fog,carbon dioxide, dry chemical, and foam	

V - Reactivity Data

Stability (Conditions to avoid):	Hazardous Decomposition:
Stable. Avoid fire and high temperatures	Carbon monoxide, carbon dioxide, carbon, water hydrogen halide.
Incompatibility (materials to avoid):	Hazardous Polymerization:
Will dissolve in most organic solvents and Some insecticides, aldehydes and amines.	None

VI - Health Hazards & First Aid

Principle Health Hazards & Signs

And Symptoms of Exposure:

Eye Contact:

Dust or particles may cause mechanical eye irritation

And / or injury

Inhalation:

Dust from mechanical fabrication may cause upper respiratory

Irritation. Fumes from hotwire cutting can also cause upper

Respiratory irritation.

Skin Contact:

None. May produce slight skin irritation in a few individuals.

Ingestion:

Biologically inert. May act as obstruction if swallowed.

Carcinogenicity:

None

Eyes:

Rinse with clean water. Remove foreign particles with clean, lint free cloth. Obtain medical attention if pain, blinking, tears or redness persists.

Inhalation:

If overcome by exposure, move to fresh air. Provide Oxygen and artificial respiration. Get medical attention.

Skin:

Not expected to present skin hazard. Wash exposed areas with soap and water. Consult physician if

Irritation persists.

Ingestion:

Not expected to present significant ingestion hazard.

Consult physician if swallowed.

VII – Employee Protection

Personal Protective Equipment:

Respiratory Protection:

Use approved dust mask when sawing or sanding.

Skin Protection:

None required. Wear gloves or sleeves if sensitivity noted.

Eye Protection:

Use approved safety glasses/goggles when sawing/sanding.

Safety Precautions:

Use positive ventilation. Mechanical fabrication, Sanding, ect. Requires the use of safety glasses/goggles and dust mask.

Spill or Leak Procedures

Spill, leak or release handling:

Normal good housekeeping should be observed.

Material can be swept or picked up and placed in suitable container for disposal.

Reportable Quantity:

None

Disposal Method:

Recycle, incinerate (WTE) or landfill per local

And state regulations.

IX – Special Precautions

Storage and Handling:

Expanded polystyrene, although it contains a flame retardant

Additive, is considered to be combustible and adequate protection

From sources of ignition should be takes.

Transportation Requirements:

Not a D.O.T. “ Hazardous Material “

The information contained herein is provided as a general reference. Energy Systems, Inc. believes the data set forth

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