



MATERIAL SAFETY DATA SHEET

January 7, 2010

Section I

Chemical Name	Expanded Polystyrene Foam (EPS)
Chemical Family	Polystyrene
Formula	(C ₈ H ₈) _n with flame retardant additive

Section II Hazardous Ingredients

None when residual pentane blowing agent is reduced to level described in Section IX

Section III Physical Data

Boiling Point	Not applicable
Solubility in Water	None
Specific Gravity	Apparent Density 1.0 to 2.0 pcf density
Percent Volatile by Volume	(pentane & water) 0.18% (see Section IX)
Evaporation Rate	Not applicable
Appearance and Odor	Rigid cellular foam block or board – no odor

Section IV Fire and Explosion Hazard Data

Extinguishing Media	Water fog, CO ₂ , dry chemical
Special Fire Fighting Procedure	None
Unusual Fire and Explosion Hazards	May emit large volume of dense, black smoke

Section V Health Hazard Data

Threshold Limit Value	None
Effects of Overexposure	None
Emergency and First Aid Procedures	None

Section VI Radioactivity Data

Stable	Yes
Incompatibility	None
Hazardous Decomposition Products	None
Hazardous Polymerization	Will not occur
Conditions to Avoid	None

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Section VII Spill or Leak Procedures

Steps to be taken in case material is released or spilled: normal good housekeeping should be observed in properly disposing of scrap material.

Waste Disposal Method: According to local ordinances.

Section VIII Special Protection Information

Respiratory Protection	None – may act as obstruction if swallowed
Ventilation	None
Protective Gloves	None
Eye Protection	Safety glasses recommended to avoid mechanical irritation from dust if saw fabricating

Section IX Special Precautions

Immediately after molding expanded polystyrene into blocks, the residual blowing agent, pentane, entrapped within the blocks ranges from about 2.0 to 3.0% by weight. The blocks are then stored at room temperature or at an elevated temperature (e.g., 130°F) to reduce the entrapped pentane and moisture to less than 1% by weight (0.18% by volume) dimensional stabilization. The block storage areas must be, therefore, adequately ventilated to avoid build up of pentane vapors.

If the product in block or board form is to be fabricated by hot-wire cutting, work areas should be ventilated to avoid a build-up of processing fumes.