

Progressive Foam Technologies  
800-860-3626  
Material Safety Data Sheet

Expanded Polystyrene is not listed as a toxic or hazardous material by either O.S.H.A. or T.O.S.C.A. The purpose of this Material Safety Data Sheet is to familiarize you with E.P.S. and aid in the establishment of material handling and employee safety procedures.

- Section I: Identification
- A. Product Name: Expanded Polystyrene
  - B. Chemical Synonym: E.P.S.
  - C. Chemical Family: Carbocyclic Polymer
- Section II: Hazardous Ingredients
- A. Pentane (Blowing Agent)
  - B. Percent Present: 1.0% maximum
  - C. Hazard Data
    - 1) Inhalation
    - 2) Fire: Threshold Limit Value 600 ppm 1800 mg/m<sup>3</sup>
  - D. Notes: EPS, as a finished cellular board, contains less than 1.0% residual pentane. Pentane is not dangerous or harmful in any way until it reaches a concentration of 1.5% or greater in the air.
- Section III: Physical Data
- A. Appearance and Odor: Rigid cellular board - no odor.
  - B. Density: 1 pound per cubic foot +/- .1 lb.
  - C. Solubility in water: Insoluble
  - D. % Volatile: 1.0% maximum
  - E. Ignition Temperature (Will actually burn): 675 degrees F.
- Section IV: Fire & Explosion Hazards
- A. Flash Point: N/A
  - B. Explosive Limit: 1.5% or greater Pentane in air.
  - C. Extinguishing Media: Carbon Dioxide, Water Spray Foam or Dry Chemical
  - D. Special Precautions: Use large volume of water directly on flame or burning surface.
- Section V: Health Information
- A. Effect of Overexposure:
    - 1) Eye - dust or particles may cause mechanical irritation
    - 2) Ingestion - may act as an obstruction if swallowed, as would any bulky inert material.
  - B. Toxicity Test: N/A; Expanded Polystyrene is biologically inert.
- Section VI: Emergency First-Aid Procedure
- A. Inhalation: Consult physician if irritation of respiratory passages occurs.
  - B. Eye Contact: Remove particles with clean lint free cloth, then consult physician.
  - C. Skin Contact: Consult physician for contact Dermatitis.
  - D. Ingestion: Consult physician.
- Section VII: Reactivity Data
- A. Chemical Stability: Stable
  - B. Hazardous Polymerization: will not occur
  - C. Condition to Avoid: Flames and high temperatures.
  - D. Materials Avoid:
    - 1) Hydrocarbons
    - 2) Esters (Organic compound used in solvents)
    - 3) Insecticides
    - 4) Amines
    - 5) Aldehydes
  - E. Hazardous Decompositions Products (If EPS is burned):
    - 1) Carbon Monoxide
    - 2) Carbon Dioxide
    - 3) Carbon
- Section VIII: Spill or Leak Procedures
- A. Spill or Leak Procedures: Collect into a suitable container.
  - B. Waste Disposal: Bury in approved landfill or burn in incinerator with excess oxygen.
- Section IX: Employee Protection
- A. Respiratory Protection: Dust mask may be needed when fabrication with saws or grinding equipment.
  - B. Protection Clothing: Eye protection needed when cutting by saws.
- Section X: Special Precautions
- A. Expanded Polystyrene is combustible and adequate protection from sources of ignition should be taken.