



XIFA BRAND

EXPANDABLE POLYSTYRENE

MATERIAL SAFETY DATA SHEET

SECTION I PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: EXPANDABLE POLYSTYRENE

COMPANY NAME: WUXI XINGDA NEW FOAM PLASTICS MATERIALS CO., LTD.

Address: END OF XIBEI CANAL BRIDGE,DONG QING HE VILLAGE,DONG GANG TOWN,XI SHAN DISTRICT,WUXI,JIANG SU,214196,CHINA

POST CODE: 214196

Email: sales@xingdagroup.com.cn

Tel: +86-510-88701598

Fax: +86-510-88701598

Emergency hotline: +86-532-83889090

Recommended and restricted application: EPS is a kind of small bead sized resin, due to its good performance of heat preservation, sound insulation, unique character of buffering, aseismicity, aging resistance and waterproofness, it's been widely used in construction, heat and sound insulation material, anti-seismic packaging, road construction and etc.

SECTION II. HAZARDS IDENTIFICATION

EMERGENCY SITUATION: This product is flammable. It may be harmful to eyes and irritate the respiratory tract mucosa because of the releasing of internal gas.

GHS HAZARD CATEGORY: ACCORDING TO CHEMICAL IDENTIFICATION、WARNING LABEL and the series standards of WARNING SPECIFICATION (refer to section 15), EPS belongs to CATEGORY 2 of inflammable solid, CATEGORY 3 of Specific target organ systemic toxicity - Single exposure.

Product Name: EXPANDABLE POLYSTYRENE

Chemical Name: Ethenylbenzene homopolymer

Chemical Family: Polymers

Synonyms:Oligostyrene

Polystyrene polymer latex

Styrene polymer

Vinylbenzene polymer

EPS

SECTION III. IDENTIFICATION DATA

CAS:9003-53-6

UN:2211

Material Mixture ✓

Dangerous component	Concentration,%	CAS NO.
Polystyrene	93~95%	9003-53-6
Pentane	5~7%	109-66-0

ATTENTION: (1) The flame retardant in EPS is hexabromocyclododecane(HBCD), or Brominated polymer(NOT HBCD). The additive amount is 6000-9000ppm.

(2) The Gray EPS contains 2-4% carbon material(graphite or carbon black) and flame retardant.

SECTION IV. PHYSICAL AND CHEMICAL PROPERTIES

Boiling point: NA

760 mm Hg

Melting point: 240°C

Flash point: 345-360°C

(closed cup)

Autoignition temperature: 427°C

Relative density: 1.04-1.13

PH: (25% aqueous solution) NA

Molecular weight: 10,000-300,000

Solubility in water: Insoluble

Vapor Pressure: NA

mm Hg @ 20°C

Evaporation rate: NA

(BuAc=1)

% Volatiles: NA

Vapor density: NA

(aire=1)

Appearance and odor: Colorless or white, insert solid beads

Flammable or Explosive Limits (% air) for pentane:

Lower limit 1.5%

Upper limits 7.8%

SECTION V. FIRE FIGHTING MEASURES

Extinguishing media: Use water and water spray, fog or foam.

Personal protective equipment: Wear full Bunker Gear and positive pressure self-contained

breathing apparatus.

Fire fighting instructions: Use water spray to absorb heat, keep containers cool and protect fire-exposed materials. Use water spray to flush material away from ignition sources.

Fire hazard comments: Pentane vapors may be emitted from newly opened containers or when the product is heated. Do not meet the criteria for combustible solids, but will burn if exposed to flame.

Combustion decomposition products: Burning may produce carbon monoxide, carbon dioxide and various organic chemicals.

SECTION VI. STABILITY AND REACTIVITY

Stable: Yes

Unstable: —

Hazardous Polymerization: Does not occur

Incompatibility: With strong oxidizing agents and organic materials (paraldehyde, benzaldehyde).

Hazardous decomposition products: Carbon oxides, styrene, and other toxic gases at elevated temperatures.

Conditions to avoid: Static charge, sparks, heat, and other ignition sources.

SECTION VII. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

1. **Inhalation:** Non-toxic material. High concentrations of dust may cause temporary irritation and coughing.
2. **Skin contact:** No known effect on skin contact.
3. **Eye contact:** No known effect on eye contact. Dust may cause mild irritation to the eyes.
4. **Ingestion:** No symptoms are expected following ingestion of this material.

FIRST AID MEASURES

1. **Inhalation:** If symptoms are experienced, remove victim to fresh air. If breathing is difficult give medical oxygen. Get medical attention immediately.
2. **Skin contact:** Wash contaminated area with water and non-abrasive soap. Get medical attention immediately.
3. **Eye contact :**If irritation occurs, flush the contaminated eye(s) with lukewarm, gently flowing water for a few minutes, while holding the eyelid(s) open. Get medical attention immediately.
4. **Ingestion:** Have victim rinse mouth thoroughly with water. Get medical attention immediately.

OTHER HAZARD INFORMATION

Carcinogenicity :No

Mutagenicity : No

Teratogenicity : No

LD 50 (oral, rats) : NA

LC50 (mice) : NA

**Over exposure effects: There is no known effect from chronic exposure to this product.
Repeated or prolonged exposure is not known to aggravate medical condition.**

SECTION VIII. ACCIDENTAL RELEASE MEASURES

PRECAUTIONS

- 1. Restrict access to area until completion of clean-up.**
- 2. Ventilate area of leak or spill.**
- 3. Extinguish or remove all ignition sources (heat, sparks, flames).**
- 4. Wear adequate personal protective equipment.**

CLEAN-UP PROCEDURE

Shovel material into clean, dry, labeled containers and cover. Flush area with water.

SECTION IX. PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: No specific guidelines are available. Use positive pressure self-contained breathing apparatus for fumes of burning polystyrene. For high concentrations of dust use dust respirator.

Eye/Face protection: Use chemical safety goggles.

Protective clothing: Wear chemical protective gloves, coveralls and boots. Have a safety shower and eye-wash fountain readily available in the immediate work area.

SECTION X. TRANSPORT INFORMATION

Shipping name : EXPANDABLE POLYSTYRENE

Identification number: UN2211

Hazard Class: Class 9

Packing group: III

UN transport identification: Imflammable solid

UN dangerous classification: Imflammable solid

Packaging: 25kg kraft-plastics laminated bag/650kg/1200kg flacon bag

Marine pullutant: No

SECTION XI. ECOLOGICAL INFORMATION

This section is subject to future development.

SECTION XII. HANDLING AND STORAGE

HANDLING: Report spills or failures of the engineering controls. Inspect containers for damage before handling. Prevent damage to containers and keep them closed when not in use. Avoid all ignition sources. Post "NO SMOKING" signs. Do not perform any welding, cutting, soldering, drilling or other hot work on any empty vessel, container or piping unit residues have been cleared.

STORAGE: Store in a cool, dry, well-ventilated area and away from heat and ignition sources. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Keep storage area separate from work areas. Have appropriate fire extinguishers and spill clean-up equipment in or near storage area. Storage away from incompatible materials such as organic materials. Keep containers tightly closed and labeled.

VENTILATION SYSTEM: Local exhaust ventilation is preferred to reduce hazardous exposures in work and storage areas.

DISPOSAL CONSIDERATIONS: Disposal by secure landfill, controlled incineration, or reuse and recycle may be acceptable.

SECTION XIII. LAWS AND REGULATIONS

Below regulations and standards make certain rules for the safely use, storage, transport, loading, assortment and mark of chemical products:

Production Safety Law of the People's Republic of China--No 70 of order of the president of the People's Republic of China

Regulations on the control over Safety of Dangerous Chemicals--Order NO. 344 the state council

Occupational exposure limits for hazardous agents in the workplace:Chemical hazardous agents (GBZ2.1-2007)

Occupational exposure limits for hazardous agents in the workplace:Physical agents (GBZ2.2-2007)

The Globally Harmonized System of Classification and Labelling of Chemicals(GHS)

General Rule for Classification and Hazard Communication of Chemicals

List of dangerous goods (GB12268-2005)

Safety data sheet for chemical products content and order of sections (GB/T16483-2008)

THIS INFORMATION IS BASED UPON CALCULATED DATA.THE COMPANY HOLDS NO RESPONSIBILITY FOR DAMAGE SUFFERED BY THE PURCHASER OR OTHER PERSONS HANDLING THESE GOODS IF SAFETY INSTRUCTIONS ARE NOT OBSERVED.THE COMPANY HOLDS NO RESPONSIBILITY FOR THE WRONG USE OF THIS MATERIAL, EVEN IF SAFETY INSTRUCTIONS HAVE BEEN FOLLOWED. THE PURCHASER IS SOLELY RESPONSIBLE FOR THE USE OF THIS MATERIAL.

