Safety Data Sheet

acc. to NOM-018-STPS-2015 and NMX-R-019-SFCI-2011

Expandable polystyrene

Version number: GHS 3.0 Date of compilation: 2025-01-30

SECTION 1: Identification

1.1 Product identifier

Identification of the substance: EXPANDABLE POLYSTYRENE

CAS number: 9003-53-6

SYNONYMS: Ethenylbenzene Homopoymer (containing penthane as expansion agent), Olygoestyrene; Polymer of estyrene; Polymer of vinylbenzene; EPS. poli (phenylethene).

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Used mainly for the manufacture of thermal insulation foams and packaging.

1.3 Details of the supplier of the safety data sheet

Novidesa SA de CV
Km. 154 Carr. México - Veracruz (Vía Texcoco), Km. 8 Carr. Apizaco-Veracruz
San Cosme Xalostoc, Tlaxcala

e-mail (competent person): jalvarez@idesa.com.mx (Juan Carlos Alvarez)

1.4 Emergency telephone number

Emergency information service: Tel. (55) 5559 1588 Cd. de México.

SETIQ: 800 0021400/ CHEMTREC 800-424-9300 (USA) / 703-527-3887
/ CANUTEC 613-996-6666 / 8882266832

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

This substance does not meet the criteria for classification.

Additional information

According to the results of its assessment, this substance is not a PBT or a vPvB.

2.2 Label elements

Labeling

not required

2.3 Other hazards

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

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SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance: Expandable polystyrene.

Identifiers

CAS No: 9003-53-6

Molar mass: >160 000 g/mol

Chemical Name	Contenido (P/P)	CAS Number
Poliestireno	>92%	9003-53-6
Pentano	>=4.0<7.0%	109-66-0
Otros	>1%	Confidential

SECTION 4: First-aid measures

4.1 Description of first- aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Foam, ABC-powder

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Deposited combustible dust has considerable explosion potential.

Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains, Take up mechanically

Advices on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal precautions: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas. Ground/bond container and receiving equipment.

- Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Removal of dust deposits.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

These information are not available.

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear protective gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	solid (spherical)
Color	White.
Odor	smooth

Other safety parameters

pH (value)	not applicable
Melting point/freezing point	240 °C
Initial boiling point and boiling range	not determined
Flash point	345 – 360 °C
Evaporation rate	not determined
Flammability (solid, gas)	non-combustible
Explosion limits of dust clouds	not determined

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Vapor pressure	not determined
Density	not determined
Vapor density	this information is not available
Relative density	information on this property is not available
Solubility(ies)	not determined

Partition coefficient

- n-octanol/water (log KOW)	this information is not available

Auto-ignition temperature	not determined
Viscosity	not relevant (solid matter)
Explosive properties	none
Oxidizing properties	none

9.2	**Other information**	

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

Hints to prevent fire or explosion

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification acc. to GHS

This substance does not meet the criteria for classification.

Acute toxicity

Shall not be classified as acutely toxic.

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	**UN number**	2211 not subject to transport regulations
14.2	**UN proper shipping name**	POLYMERIC BEADS, EXPANDABLE
14.3	**Transport hazard class(es)**	
	Class	9 (miscellaneous dangerous substances and articles)
14.4	**Packing group**	III (substance presenting low danger)
14.5	**Environmental hazards**	
14.6	**Special precautions for user**	

There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport information - National regulations - Additional information (UN RTDG)

UN number	2211
Proper shipping name	POLYMERIC BEADS, EXPANDABLE
Class	9
Packing group	III
Danger label(s)	9

Special provisions (SP)	207 (UN RTDG)
Excepted quantities (EQ)	E1 (UN RTDG)
Limited quantities (LQ)	5 kg (UN RTDG)

International Maritime Dangerous Goods Code (IMDG)

Not subject to IMDG.

UN number	2211
Proper shipping name	POLYMERIC BEADS, EXPANDABLE
Class	9
Packing group	III

Danger label(s)	9

Special provisions (SP)	207, 965
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 kg
EmS	F-A, S-I
Stowage category	E

International Civil Aviation Organization (ICAO-IATA/DGR)

Not subject to ICAO-IATA.

UN number	2211
Proper shipping name	Polymeric beads, expandable
Class	9
Packing group	III
Danger label(s)	9

Special provisions (SP)	A38
Excepted quantities (EQ)	E1

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

There is no additional information.

National regulations (United States)

Toxic Substance Control Act (TSCA) substance is listed

SARA TITLE III (Superfund Amendment and Reauthorization Act)

- Specific Toxic Chemical Listings (40 CFR 372) (EPCRA Section 313)

not listed

New Jersey Worker and Community Right to Know Act N.J.S.A. 34:5A-1 et. seq.

not listed

California Environmental Protection Agency (Cal/EPA): Proposition 65 Chemicals known to the State to cause cancer or reproductive toxicity

not listed

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

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SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
EmS	Emergency Schedule
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Norma Oficial Mexicana NOM-018-STPS-2015, Sistema armonizado para la identificación y comunicación de peligros y riesgos por sustancias químicas peligrosas en los centros de trabajo y NMX-R-019-SCFI-2011 Sistema Armonizado de Clasificación y Comunicación de Peligros de los Productos Químicos.

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UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

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