



PRODUCTS Safety Data

In accord with Directive 2001/58/EC

ESLATIRENE PS (Polystyrene)

01. Identification of the product and of the company

Identification of the product: ESLATIRENE PS (Commercial name)

Chemical name: Polystyrene (PS, HI PS). Family: polymers of polystyrene monomer
N° CAS: 9003-53-6

Chemical formula: $(C_8H_8)_x$

Identification of the administrator: (ESLAVA PLÁSTICOS S.A. (Name of the company)

Registered address: Calle Rio Vinalopo 31. Tel.: 961 920 212 Fax: 961 920 298

REACH pre-registration: *QC378775-24*

Common use and applications: packaging, technical parts, extrusion and injection.

02. Identification of hazards

It is insoluble in water. No particular hazards known to man and the environment, except for being a solid fuel with a flashpoint above 300°C and from 65°C melts. In combustion, if the amount of air is sufficient, the main product is generated CO₂. In air gap produces smoke (soot), carbon monoxide and various oligomers and aldehydes, which cause irritation to eyes, skin and respiratory system.

It degrades slightly to long exposures to light and weather, had a fledgling to its composition. If not explicitly additive is not biodegradable. The environmental damage caused by neglect of objects with PP, are mechanical, not biological type.

Generic term for all grades of polyethylene:

HMIS and NFPA Ratings: Health 0, Fire 1, Reactivity 0 (0 = minimal, 1 = mild)

Personal Protection: Safety glasses, gloves, respirator.

The product is a solid which is in the form of granules, non-toxic and minimal odor. Dust contact with eyes may cause mechanical irritation. Contact on the skin can produce mild irritation, although in contact with hot molten material may cause severe burns. In practice there has been no risk of dermatitis by normal handling. Ingestion of this product is unlikely.

03. Composition / Information on the components

Chemical characteristics: **RECYCLING OF POLYESTYRENE OBTAINED BY SELECTION PROCESS, WASHING AND regrind to 180 ° C. NOT FOR USE COLORED PIGMENTS DYES OR COMPOSED OF HEAVY METALS TO FORM PART, SO MAY RESULT IN MERGER OVER 100 ppm.**

As base materials are known varieties homo-and copolymers and atactic and syndiotactic, which refers to polymerization mode in his collection, but that affects only the mechanical properties. According to its intended application, polystyrene can be an additive type loads talc (magnesium silicate CAS 14807-96-6), colors (made from mixtures of Calcium Carbonate and Titanium Dioxide CAS 3463-67-7 No Color White) or Carbon Black (CAS No. 1333-86-4 black).

This material **is not regulated** as hazardous materials or dangerous goods for transport.

04. First aids

In case of contact with skin:

With hot molten product, cool rapidly with cold water, risk of thermal burn. Visiting a doctor.

In case of smoke inhalation in a fire: If the exposure is prolonged or s.

evere, can cause delayed pulmonary edema.

05. Measures for combating fire

Suitable extinguishing media:

Water, Foam, Gas fire extinguishers, dry powder, water spray.

Modes of extinction should not be used: none

To prevent inhalation of airborne pollutants or smoke during a fire should be contained breathing apparatus mask positive pressure mode.

The material extinct if not properly cooled, you can re-ignite (spontaneous combustion (Autoignition from 400 ° C).

06. Measures to be taken in the event of accidental spillage

Method of cleaning up:

Take up mechanically. The granules are less dense than water, so they get to float in it, accumulating in watery areas.

07. Handling and storage

Handling: safe

Take steps to prevent accumulation of electrostatic charges.
Provide local exhaust / ventilation at processing machines.

Storage

Stability:

Storing the product at temperatures below 40 ° C, stability is unlimited. Own care should be taken only in case of fire of solids.

In case of polyethylene dust accumulation over time for its handling, this dust can be irritating and, in case of fire, fire can spread the trickle.

Provide local exhaust / ventilation at processing machines, whose operating temperature often exceed 120 ° C.

08. Limitations to exposure and personal protection measures.

Personal protection: No special measures required if handled with good practice.

General protective measures: In the event of use as dust masks.

Hygiene measures:

Do not smoke, eat or drink while working.

Occupational exposure limits: no limits have been established.

Additional security measures: Use safety footwear, given the risk of slipping Avoid overheating, sparks and flames in the vicinity of storage and where dust may have accumulated.

09. Physical and chemical properties

Aspects:

State: physical granular or powder if required.

Color: white or colored.

Odor: Odorless

Significant data security:

Status Change: Melting point of crystallites: from 70 ° C to 90 ° C

Flash point: Not applicable

Ignition Temperature: Approx. 350 ° C

Flammability Classification: Nonflammable

Vapor Pressure: Not applicable.

Mass density: between 1.05 and 1.08 g / cc at 23 ° C (water = 1)

Bulk density (transport): between 400 and 600 kg/m³

Sensitivity to water: Not soluble

The PP-based polymers may be present in unprocessed form of powder, to which precautions must be taken to handle combustible dusts themselves, even at the risk of explosion if dispersed.

10. Stability and reactivity

Thermal decomposition: Approx. 300°C

Heat of combustion: min 9500 kcal / kg

Dangerous reactions:

No dangerous reactions known.

Hazardous decomposition products: at temperatures above 400°C, its decomposition is accelerated, producing hydrocarbons, aldehydes, and CO

Smoke-free nitrogen, chlorine and sulfur.

11. Toxicological information

The polystyrene based materials are considered essentially inert and nontoxic.

Bibliographic data on acute toxicity: the premises must be ventilated to avoid concentrations above 50 mg/m³ styrene monomers due to degradation, recommending for permanent exhibitions not exceed 10 mg/m³.

Comment:

Based on the experiences of several years and in a proper, there are no known side effects caused by the product, materials used for recycling PS were selected from post-consumer materials that have not come into contact with dangerous products.

12. Ecological information

The product is not soluble in water. They are not biodegradable unless expressly additives.

The product is not dangerous for fish and bacteria.

In wastewater treatment plants can be separated by mechanical (flotation).

13. Waste disposal

Recyclable thermoplastic material. The product can be easily recycled, if your application has been considered that their design has been guided in their recovery.

The product can be harnessed energy, given its high net heat of combustion. In landfill for non-bacteriological and fermentation is degraded unless it is made specifically for that purpose.

If you have to resort to removal procedures, can be oriented prior to energy recovery in appropriate facilities, with the final deposition controlled landfill as a last resort destination.

In water treatment plants can be separated mechanically by flotation.

14. Information related to transport

Land transport

ADR (Not classified s hazardous goods)

RID (Not classified as hazardous goods)

Waterway transport

ADNR (Not classified as hazardous goods)

Sea transport

IMDG (Not classified as hazardous goods)

Air transport

ICAO/IATA (Not classified as hazardous goods)

Sending by post: permitted

Nor is subject to risk identification

15. Provisions of legal nature

Should be consulted by areas of application and standardization of products developed.

Additionally, see the Standardization developed (ASTM, ISO, UNE) for characterization, identification and establishment of traceability.

16. Other information

This information is based on the current state of our knowledge. The products are described as regards their safety and this does not constitute a guarantee regarding specific properties due to handling or incorrect prevention measures.