

SAFETY DATA SHEET (SDS)

According to EU Regulation 2020/878 · FS-CAL/03 · Rev-3 / September 2023
Commercial Name: **ESLAPRENE PP**

1. Product and company identification

PRODUCT IDENTIFICATION

Chemical name: Polypropylene

Family: Propylene monomer polymers

Other synonyms: PP homopolymer and PP copolymer

Chemical formula: (C₃H₆)_x

CAS number: Homopolymer-9003-07-00 and Copolymer-9010-79-1

Recycled polypropylene pellets.

COMPANY NAME

ESLAVA PLASTICOS SA

Establishment: c/ Riu Vinalopó 49-51, Quart de Poblet (València)

Phone: 961 920 212 / Email for inquiries: calidad2@eslavaplásticos.com

Pre-Registration REACH: GN387041-36 | QL379270-25 | JS367170-24 |
NV378360-08 | VW387172-96 | LG387297-24

MOST COMMON USES AND APPLICATIONS

Plastic transformers for extrusion and injection to produce agricultural protections, packaging, technical parts, irrigation pipes, film for bags and sheets, among other applications.

1. Product and company identification
2. General hazard identification
3. Composition/information on components
4. First aid measures
5. Firefighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure limits and personal protection measures
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Waste disposal
14. Transport information
15. Legal provisions
16. Other information

2. General hazard identification

The product is not classified as hazardous according to Regulation (EC) 1272/2008 or subsequent amendments.

The product does not require hazard identification according to Regulation (EU) 2020/11.

The product is a solid presented in granule form, non-toxic, and with minimal odor. It is insoluble in water. There are no known specific hazards to human health and the environment, except those related to being a solid fuel with a flash point above 350°C and melting between 105–115°C. During combustion with sufficient air, the primary product generated is CO₂. In inadequate air conditions, it produces smoke (soot), carbon monoxide, and various oligomers and aldehydes, which can cause irritation to the eyes, skin, and respiratory system. During production or subsequent handling, the generation of small combustible particles in the air or bioaccumulation in aquifers should be avoided.

It degrades slightly under prolonged exposure to light and weather, which incipiently affects its composition. Without specific additives, it is not biodegradable.

Environmental damage from abandoned PE objects is primarily mechanical, except that long-term exposure to weather may lead to the formation of secondary microplastics smaller than 1 mm, considered environmentally persistent (Regulated by CLP-Nov 2023) and consequently leading to bioaccumulation. Not of biological origin.

Dust contact with the eyes may cause mechanical irritation. Contact with the skin can cause mild irritation; however, contact with the material in its hot melted state can cause severe burns. There is no observed risk of dermatitis from normal handling. Ingestion of this product is unlikely.

Generic rating for all grades of Polyethylene:
HMIS and NFPA Ratings: Health 0, Fire 1, Reactivity 0 (0 = minimal, 1 = slight).

Precautionary codes:

P210: Keep away from heat, sparks, and open flames.

P273: Avoid release to the environment.

P302: In case of contact with skin, especially if hot or in a molten state, wash with plenty of water.

P280: Recommendation: Personal protective equipment: safety glasses, gloves, respirator.

3. Composition/information on components

Chemical Characteristics:

Recycled Polypropylene obtained through a selection, washing, and regranulation process at 200°C. No colorants or pigments containing heavy metals are used in its coloring process, ensuring concentrations do not exceed 100 ppm.

As base materials, polypropylene is known in various forms such as homopolymers and copolymers, as well as atactic and syndiotactic forms, which refer to the mode of polymerization during its production, affecting primarily its mechanical properties. Depending on its intended application, polypropylene can be compounded with fillers like talc (magnesium silicate CAS 14807-96-6), colorants (based on mixtures of calcium carbonate and titanium dioxide CAS No. 3463-67-7, white color) or carbon black (CAS No. 1333-86-4, black color). The copolymer variety is identified as 9010-79-1. It may also be reinforced with 10% fiberglass (silicates).

These products are not classified as hazardous according to Regulation EC 1272/2008, 2019/1390, and amendment 2023/923.

4. First aid measures

In case of skin contact:

- With hot melted product, cool rapidly with cold water to prevent thermal burns. Seek medical attention.

In case of smoke inhalation during a fire:

- Prolonged or intense exposure may cause delayed pulmonary edema.

5. Firefighting measures

Appropriate extinguishing media:

- Water or water spray
- Foam
- Extinguishing gases
- Fire extinguishing powder

Extinguishing methods that should not be used: None.

- To avoid inhalation of airborne contaminants or smoke, use a self-contained breathing apparatus with a mask in positive pressure mode.

6. Accidental release measures

The granules are less dense than water, thus they float and can accumulate on water surfaces (OCR Regulation proposal).

- Use intact containers and apply safety measures during processing, storage, and transportation.
- Dispose and collect using mechanical means.
- Filter rainwater from yards or processing areas through screens with mesh smaller than 1 mm to prevent entry and spread in waterways.
- Establish spill prevention procedures and cleanup methods.
- Risk of slipping.

7. Handling and storage

Handling: No danger if kept away from heat sources.

Storage

Stability: When stored below 40°C, the product has unlimited stability. The material is not self-combustible, but precautions should be taken for solid material fires (fire prevention according to RSCIEI). Storage (P-401) must comply with legally established safety conditions.

8. Exposure limits and personal protection measures

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

Occupational hygiene measures: No smoking, eating, or drinking during work.

Occupational exposure limits: No established limits. Avoid the formation of inhalable dust during handling; if dust is present, the recommended limit for inhalable particles is 10 mg/m³ (TWA).

Additional protection measures: Use safety footwear due to slip hazard. Avoid overheating, sparks, and flames near storage areas or where dust may accumulate.

9. Physical and chemical properties

Characteristics

Physical state: Granular

Color: Whitish or colored.

Significant safety data

Change of state: Melting point of crystallites:
LDPE: 106°C to 130°C / HDPE: 128°C to 135°C

Flash point: Not applicable.

Ignition temperatures: Approx. 350°C

Flammability classification: Non-flammable.

Vapor pressure: Not applicable.

Bulk density: between 0.890 and 0.980 g/cm³ at 23°C (water = 1)

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

Water sensitivity: Insoluble..

10. Stability and reactivity

Thermal decomposition: Approx. 290°C

Heat of combustion: 43-45 MJ/kg (9500 kcal/kg)

Hazardous reactions: No hazardous reactions known.

Hazardous decomposition products: At temperatures above 400°C, decomposition accelerates, producing hydrocarbons, aldehydes, and CO.

Smoke without nitrogen, chlorine, or sulfur.

11. Toxicological information

Polypropylene-based materials are considered fundamentally inert and non-toxic.

Acute toxicity bibliographic data LD50/LC50 CAS 9002-88-4: Lethal concentration by inhalation for 50% of mice is 12 g/m³ (30 minutes).

Remarks:

Based on several years of experience and proper use, no adverse effects caused by the product are known. The materials used to produce recycled LDPE are Non-Hazardous, derived from the selection of post-consumer materials as established in TED/646/2923 Order for End of Waste Condition of Recycled Plastic Materials.

12. Ecological information

Remarks:

The product is insoluble in water. It is not biodegradable unless specifically additivated.

The product is not hazardous to fish and bacteria.

In wastewater treatment plants, it can be mechanically separated (flotation).

13. Waste disposal

Recyclable thermoplastic material. The products (applications) produced can be easily recycled if their design has considered recovery and recycling.

The product can be energetically valorized due to its high net calorific value. In landfill, it does not undergo bacteriological degradation or fermentation, unless specifically formulated for such purposes.

In case of disposal procedures, prior orientation towards energetic valorization in suitable facilities is recommended, with final disposal in controlled landfill as a last resort.

In water treatment plants, it can be mechanically separated through flotation or filtration.

14. Transport information

Land transport (ADR) / (RID): Not classified as dangerous goods.

Bulk transport (Marpol Annex II): Not applicable.

River transport (ADNR): Not classified as dangerous goods.

Maritime transport (IMDG): Not classified as dangerous goods.

Air transport (ICAO/IATA): Not classified as dangerous goods.

Shipping by post: Allowed. Not subject to risk identification.

15. Legal provisions

The information should be consulted by sectors of application and the standards developed for products.

Additionally, the standards (ASTM, ISO, UNE) can be consulted for characterization, identification, and establishing traceability.

16. Other information

This information is based on our current state of knowledge. Products are described for safety purposes, without constituting a guarantee of specific properties or due to incorrect handling and preventive measures