

JACKON Safety Data Sheet

Jackopor® EPS

Jackon©06-2021

1. Name of product and company

TRADING NAME: Jackopor and EPS cellular plastic
CHEMICAL NAME: Expanded polystyrene (EPS)
SYNONYMS: Styrene cellular plastic, Poly(phenylethene)
FORMULA: (C₆H₅CH=CH₂)_n
PRODUCT TYPE: Building insulation, wall insulation blocks and packaging
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2. Composition/Substance classification

SUBSTANCE	CAS-NO	CONC. (WEIGHT)	CLASSIFICATION
Polystyrene	9003-53-6	>98%	Unclassified
Pentane (mixed isomers)	109-66-0/78-78-4	<2%	F+,Xn,N;R12-65-66-67-51/53

Comments: Pentane concentration is highest directly after manufacturing and thereafter gradually decreases. After approximately one month, the level of pentane is practically zero.

For a specification of hazard codes and R-codes, see section 16.

3. Hazardous properties

The product is not classified as hazardous to health or the environment and is not flammable. No special risks involved in normal handling.

4. First aid

Symptoms: None known
Inhalation: Fresh air.
Skin contact: No special measures
Contact with eyes: Dust in the eyes can be flushed with water
Ingestion: No special measures
Medical information: Treatment based on symptoms.

5. Measures in the event of fire

Extinguishant: Foam, water spray or mist. For smaller fires, powder, CO₂, sand or soil can be used. Single water jets are not recommended

Fire fighting: When extinguishing fires, complete protective equipment and respirator devices must be used. Materials close to fires must be moved if possible or cooled with water to prevent the fire spreading. Rapid intervention is important in all types of fire.

Risk of fire and explosion: Not classified as flammable – but is combustible. EPS melts at high temperatures. Products from combustion are carbon dioxide (CO₂) and water. Combustion gases can contain small amounts of carbon monoxide (CO). If the supply of oxygen is limited, greater proportions of carbon monoxide (CO) are formed.

6. Measures in the event of spill/unintended emissions

Preventive measures: Eliminate all ignition sources. Smoking prohibited. Avoid sparks. Take steps to prevent electrostatic discharges.

Spill collection: Collect product and place in suitable containers for recycling or other container. See section 13 for information on recycling, waste handling and destruction.

Disposal after fire: Residual material after a fire must be handled according to local regulations. Do not empty extinguishant into drains/open water/water courses

7. Handling and storage

Handling: Avoid inhalation of smoke or fumes from heated product. Ensure that no naked flames are used or other ignition sources are found where the product is handled. Avoid sparks. Smoking is prohibited. Take steps to prevent electrostatic discharges.

Storage: Must be stored in a dry, cool place. Must be kept out of direct sunlight and other heat or ignition sources. EPS can be blown around in strong winds, take suitable precautions.

8. Exposure limits/personal protection measures

Hygienic limit values:	Pentane 2000 mg/m ³ (short-term value)
Preventive measures:	Newly manufactured EPS must be handled in well-ventilated spaces
Inhalation protection:	No special measures
Eye protection:	No special measures.
Hand protection:	No special measures
Skin protection:	Normal work clothing

9. Physical and chemical properties

Product form:	Plates, blocks and fabricated.
Color:	White or coloured.
Odour:	Very weak.
Solubility:	Soluble in a range of solvents, incl. aromatic hydrocarbons, hydrogenated hydrocarbons and ketones.
Solubility in water:	Not soluble.
Density:	15-40 kg/m ³
Explosion threshold:	1.3 – 7.8 volume-% (pentane).
Ignition temperature:	285°C (DIN 51794).
Sag point:	>70°C

10. Stability and reactivity

Stability: Stable during normal handling. Decomposes at temperatures above 200°C

Conditions for be avoided: Heat, fire and sparks. Avoid exposing the product to strong sunlight for long periods. Avoid contact with organic solvents.

11. Toxicological information

Basis for information: The information is based on knowledge concerning components and toxicology relating to comparable products.

ACUTE TOXICITY - ORAL:	LD50>2000 mg/kg (estimated).
ACUTE TOXICITY - DERMAL:	LD50>2000 mg/kg (estimated).
ACUTE TOXICITY - INHALATION:	LC50 anticipated greater than 5 mg/l.

Inhalation: High concentrations of pentane have an irritant effect on respiratory membranes.

Skin contact: Non-irritant.

Eye contact: Dust can cause mechanical irritation.

Sensitising: Available information does not indicate that the product has a sensitising effect.

Mutagenicity: Not considered a mutagen.

Carcinogenicity: Not carcinogenic.

Reproduction toxicity: Does not affect fertility.

12. Environmental toxicological information

Basis for information:	The information is based on knowledge concerning components and toxicology relating to comparable products.
Mobility:	The product is not soluble in water. Floats on water.
Persistence/degradability:	Not readily biologically degradable
Bioaccumulation:	Dies not bioaccumulate.
Aquatic toxicity:	The product is not considered to be toxic to aquatic organisms (estimated

13. Waste handling

The product is suitable for material recycling or energy recovery.

The following precautions are recommended:

- Clean products: Material recycling
- Contaminated products: Energy recovery.
- Products contaminated with substances harmful to health or the environment: In accordance with waste handling regulations

The product is completely inert and does not contain substances that can leak and contaminate groundwater on disposal.

14. Transport information

Not classified as hazardous goods according to UN, IMO, ADR/RID or IATA/ICAO.

15. Applicable regulations

Not classified as hazardous to health or the environment according to applicable legislation relating to chemical products.

Products are labelled with a recycling symbol in accordance with international recommendations.

16. Other information

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The information in this document is based on current knowledge and is provided for health, safety and environmental purposes. The information must not be considered a specification or a guarantee for a specific property of the product.

Emissions measurements have been carried out using SP method 1598, see protocol 94:k2 084:2

Specification of hazard codes and R-codes stated in section 2:

F+	Extremely flammable
N	Harmful to the environment
Xn	Harmful to health

R12	Extremely flammable
R65	Hazardous, can cause lung damage if ingested
R66	Repeated contact can lead to dry or cracked skin
R67	Fumes can cause drowsiness/dizziness
R51/53	Toxic to aquatic organisms, can cause harmful long-term effects in aquatic environments.