

Product Information Data Sheet Polyurethane flexible foam

According to REACH Regulation (EU Regulation 1907/2006EC) Polyurethane foams have to be considered as "articles". They are identified as industrial polymers.

Polyurethane foams are not considered to be hazardous products nor as preparations of dangerous substances.

No MSDS necessary

Emergency telephone number +48 (42) 716 38 54 int. 268 or 319

1. Identification of product and manufacturer

Polyurethane flexible foam /PUR/- Polyether PUR, Polyester PUR foam, High Resilient PUR foam used in automotive, shoes, furniture industry and another .

2. Composition / information of components

Nr CAS	Chemical name	Summary formula	%
lack data	Polyurethane polymer	lack data	100
Poly-addition product of isocyanates, polyether/polyester polyols and water, controlled by catalysts, stabilizers and other substances, resulting in a cellular polyurethane foam.			
The isocyanate and polyol are completely reacted during manufacture and foam, as supplied, contains no free isocyanate.			

3. Hazards identification

Not concern

4. First aid

Inhalation of dust : Move to fresh air.

Eye contact: Dust particles can cause mechanical irritation. Rinse with water to remove dust.

Skin contact: No adverse effects known following contact with PU foam.

Microbiological hazard: product is sterile after production

5. Fire hazard

Suitable fire extinguishers: water, CO₂, dry powder, liquid foam.

Especially fire hazardous:

The product is a combustible material and causes, when burning, intense heat and dense smoke.

The product can, when heated also melt and flammable decomposition products can be generated. In a fire, decomposition products such as carbon black, carbon monoxide, carbon dioxide, gaseous hydrocarbons and nitrogen containing products can be generated in various concentrations depending on the combustion conditions. Also corrosive gases could be generated if foam grade contains flame retardants.

Human protection in large fires: Fire fighters should use self-contained breathing apparatus.

6. Requirements in cause of relese

Not concern

7. Storage & Processing:

Because of the fire risks associated with certain processing operations and storage it is advisable to seek expert guidance on fire precautions that need to be in place.

Foams should be kept in dry and clean areas away from heat sources, must be free space between rows of foams and sides storage hall to make possibility access.

UV rays may cause surface discoloration. This does not affect the foam qualities.

Ventilation during some operations: Local exhaust ventilation is necessary for some operations i.e. where dust is produced from buffing and flocking operations or where fumes are produced in flame laminating, heat forming and hot wire cutting.

8. Exposure controls / Personal precautions

Not concern, Protective clothing is required, when during certain processing operation of converting the foam is giving of polyurethane dust particles.

9. Physical properties

Appearance

Physical form: Solid, voluminous material, more or less elastic

Colour: Varies according to type of foam

Odour: None or mild odour

Solubility in water: Insoluble

Flash ignition point: 315 – 370 °C

Decomposition temperature: above 180 °C

Auto-ignition point : 370 – 427 °C

Thermal energy: < 28 000 kJ/kg

Specific gravity: 14 – 250 kg/m³

Solubility : insoluble only expanding in: dimethylphormamide, acetone, methanol solution and strong polar organic solutions.

10. Stability and reactivity:

Accelerated ageing: UV rays may cause surface oxidation.

The product is stable at temperatures between - 40°C and +120°C

The product can, when heated also melt and flammable decomposition products can be generated. In a fire, decomposition products such as carbon black, carbon monoxide, carbon dioxide, gaseous hydrocarbons and nitrogen containing products can be generated in various concentrations depending on the combustion conditions

11. Toxicological data

Oral – There is no evidence that PU foam is toxic orally. LD50 (oral-rats) >5000 mg/kg.

Inhalation: - Chronic inhalation of polyurethane dust particles could cause lung infection, airway obstruction and fibrosis.

Eye contact: Dust particles can cause mechanical irritation. Rinse with water to remove dust.

Skin contact: No adverse effects known following contact with PU foam.

Microbiological contamination: PU foam is sterile when manufactured.

12. Ecological information

Dependent on the type of PU foam, the product is not degradable or degrades slowly.

13. Disposal considerations

Scrap or post consumer PU foam waste can be disposed of at licensed landfill sites or by incineration under controlled conditions. Advice on the preferred method should be sought from the Local Waste Regulation Authority.

Recommend is it return of polyurethane trim to producer in order to recycled

To burn in combustion furnace which has suitable absorber because can be generated toxic decomposition products. Advice on the preferred method should be sought from the Local Waste Regulation Authority.

14. Transport information

PU foam is not classified for conveyance or supply under the Carriage of Dangerous Goods (classification, packaging and labeling) and RIAD/ADR Regulations. No special steps need to be taken for the transportation of PU foam in cause if truck is clean and cover.

15. Legislation:

Product is not considered to be a hazardous as defined by the European Union statutory order on hazardous substances. classification EEC

Warn symbol : NP.

Risk symbol : NP.

Hazard symbol : NP.

This information is furnished without warranty, expressed or implied, except that it is accurate according to the best available knowledge of the PU foam manufacturer. The data on this sheet relate only to the specific material designated herein.

The manufacturer assumes no legal responsibility for use of, or reliance upon these data. For information regarding specific applications of the product, the foam manufacturer should be contacted