

Product Information Data Sheet "AleXon"

Polyurethane foams are considered as "Materials" or "Products" ; they are identified as industrial polymers. Polyurethane foams are not to be considered as hazardous products nor as mixtures of dangerous substances. Material Safety Data Sheets are not required according to European Directive 91/155/EC. In order to be helpful to its customers however, Gilca Ltd provides Product Information Data Sheets.

Issue date: 02/2004

1. Identification of the product

Product name: Polyurethane foam

Remark: trade names: vivo-cosmo-senso-lento

Chemical description: Poly-addition product of isocyanates, polyether/polyester polyols and water, controlled by catalysts, stabilizers and other substances, resulting in a cellular polyurethane foam.

Appearance: Cellular flexible foam.

Regulatory Information: No labeling is currently required for this product by the existing EC Directives on Classification, Packaging and Labeling of Dangerous Substances.

2. Physical properties

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

Colour: variable

Specific gravity: 40 - 300 kg/m³

Solubility in water: Insoluble

Odour: No or mild odour

Flash ignition point: between 315°C to 370°C

Decomposition temperature: above 180°C

Thermal energy: 28 000 KJ/kg

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

3. Safety hazards

Auto-ignition temperature (ASTM D 1929): above 200°C

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

Melting point: The product can, when heated, also melt and flammable decomposition products can be generated. In a fire, decomposition products like 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 can be generated if foam grade contains flame retardants.

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

Human protection in big fire: Fire fighters should use self-contained breathing apparatus.

4. Toxicological data

Ingestion: No adverse effects anticipated. LD50 (oral-rats) >5000 mg/kg.

Inhalation: No adverse effects anticipated.

Skin contact: No adverse effects anticipated. Harmless.

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

Physiologically: By today's standards PUR foam gives no cause for concern physiologically.

5. Storage

Precautions: - Store away from heat sources (match, cigarette, Open fire, electrical heater, ...).

- Preferably store in a dry environment at room temperature
- UV Rays may cause surface discoloration (yellowing). This does not affect the foam quality. Protect from visible and UV light to prevent this process, preferably pack in a sealed black bag or aluminium foil

Ventilation: Provided there is adequate general ventilation, no special precautions are necessary for most handling and cutting operations. Ventilation at 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.

Protective clothing: Not required.

6. Ecological information

Biodegradability: Dependent on the type, the product is not degradable or degrades slowly. Decomposition products are not harmful to the environment.

Additional ecological data: In case of a fire with polyurethane foam, the particles that fall in the water are harmless. They are sieved out of the water and/or disintegrated in the water treatment plant. Living organisms in the water are not endangered.

7. Transport information

Labeling: Does not classify for conveyance or supply under the Carriage of Dangerous Goods (classification, packaging and labeling) and Use of Transportable Pressure Receptacles Regulations 1996. The product is not classified as hazardous for any mode of transportation under current EU/UN regulations by applying the appropriate test method.

Measures: No special steps should be taken for its transportation.

8. Disposal considerations

Production trim: Trim polyurethane foam and off-cuts can usually be recycled by several methods if uncontaminated by extraneous matter.

Post Consumer Waste: There exist a recycling option via rebonding if a series technical and economical conditions are met. If recycling is not possible, 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.

Legislation: Under environmental legislation and its directives there are no special requirements for the disposal of standard foam.

9. Disclaimer of liability

The local legislation is followed.

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of the foam manufacturer. The data on this sheet relate only to the specific material designed herein. The manufacturer assumes no legal responsibility for use of or reliance upon this data. For information regarding specific applications of the product, the foam manufacturer has to be contacted.