



'A' series acoustic foam

1. Identification of the substance/mixture and of the company

1.1 Product identifier

SIDERISE 'A' series acoustic foam.

1.2 Relevant identified uses of the substance or mixture and uses advised against
Acoustic insulation.

1.3 Details of the supplier of the safety data sheet

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1.4 Emergency telephone number

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2. Hazards identification

2.1 Main hazards

Polyurethane foams are not considered to be hazardous products nor as mixtures of dangerous substances. They are identified as industrial polymers. According to EU Regulation 1907/2006EC (REACH) Polyurethane foams are defined as "articles".

3. Composition/Information on ingredients

3.1 Identification of substance or preparation

Polyurethane polymer.

3.2 Chemical description

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

3.2 Labelling

No labeling is currently required for this material by existing EU Regulation on Classification, Packaging and Labeling of substances and mixtures (1272/2008/EC).

4. First aid measures

4.1 Description of first aid measures

4.1.1 Inhalation

If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

4.1.2 Skin

Wash thoroughly with soap and water. Consult a doctor if skin irritation persists.

4.1.3 Eye

If difficulties occur: Wash affected eyes for at least 15 minutes under running water with eyelids held open. If symptoms persist, seek medical advice.

4.1.4 Ingestion

Rinse mouth and then drink plenty of water. If difficulties occur: Obtain medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No significant reaction of the human body to the product known.

Hazards: No hazard is expected under intended use and appropriate handling.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire fighting measures

5.1 Special hazards arising from the substance or mixture

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

Auto ignition point (ASTM D 1929): Between 370°C to 427°C

Melting point: The product has no melting point but will decompose into gaseous components.

5.2 Extinguishing media

Water, carbon dioxide, dry powder, liquid foam.

5.3 Protective equipment

Fire fighters should use self-contained breathing apparatus.

5.4 Advice for firefighters

Should the burning foam come in contact with skin, cool the burned area with water without removing the foam. In case of serious burns call a doctor immediately. In the event of persons inhaling combustion gases, they must be removed from the area and given swift medical attention.

5.5 Further fire information

Terms like "is flame retarded" or "contains flame retardants" are sometimes used to describe improved ignition resistance in small-scale tests and do not reflect hazards in large scale fire conditions.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid skin contact and inhalation of dust.

6.2 Environmental precautions

Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Sweep/shovel up. Dispose of absorbed material in accordance with regulations.

6.4 Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. Handling and storage

7.1 Processing precautions

In processing flexible PU Foams all prescriptions, directives and technical rules regarding the layout of workstations, machinery safety and workplace human protection must be

observed. Because of the fire risks associated with certain processing operations on block foam (e.g. hot-wire cutting, crumbing, flame lamination, etc) it is advisable to seek expert guidance on fire precautions that need to be in place. Attention should be paid to the possibility to produce electrostatic charges during foam processing operations that may be dangerous.

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

b) Ventilation during some operations: Local exhaust ventilation is necessary for some operations i.e. where dust is produced from sawing, buffing or crumbing operations or where fumes are produced in flame laminating, thermoforming or hot wire cutting.

7.2 Precautions for safe handling

Special protective equipment and clothing is not necessary when handling foam, since it does not irritate the skin, eyes or respiratory system, except in those processes where dust is produced.

7.3 Storage

Store away from heat sources (match, cigarette, open fire, electrical heater, ...). UV rays may cause surface discoloration. This does not affect the physical properties of the foam. Store in compliance with safety standards established by local Authorities and by specific requirements of the Insurance Companies.

8. Exposure controls/personal protection

8.1 Exposure controls

8.1.1 Individual protection measures, such as personal protective equipment

No specific measures are needed for fully cured PUR foam.

■ Eye protection

Protective goggles should be worn for processes which generate dust.

■ Skin protection

Not required. In case of dust generating operations skin protective clothes are recommended.

■ Respiratory protection

Not required. In case of dust generating operations appropriate respiratory masks are recommended.

■ Hand protection

Gloves should be used when handling fresh foams.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- a) **Form:** Cellular material with elastic properties.
- b) **Colour:** Varies according to manufacturer's choice.
- c) **Odour:** None or mild odour.
- d) **Specific gravity:** 10-300 kg/m³.
- e) **Flash point:** Between 315°C to 370°C
- f) **Decomposition temperature:** Above 180°C
- g) **Thermal energy:** 28.000 KJ/kg.

10. Stability and reactivity

10.1 Hazardous reactions

The product is stable at temperatures between - 40°C and + 100°C

11. Toxicological information

11.1 Information on toxicological effects

- a) **Inhalation:** The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg/m³ 8-hour TWA of inhalable dust or 4 mg/m³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels.
- b) **Skin contact:** No adverse effects known following contact with PU foam.
- c) **Eye contact:** Dust particles can cause mechanical irritation. Rinse with water to remove dust.
- d) **Ingestion:** There is no evidence that PU foam is toxic in case of ingestion. LD50 (oral-rats) >5000 mg/kg.

e) **Microbiological contamination:** PU foam is sterile when manufactured.

12. Ecological information

12.1 Biodegradability

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

12.2 Additional ecological data

In case of a standard foam fire, 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. PU Flexible Foams do not contain Ozone depleting substances and are not produced using products regulated by pertinent Legislation.

13. Disposal considerations

13.1 Production trim

Trim polyurethane foam and off-cuts can usually be recycled by several methods, provided they are clean and sorted.

13.2 Post consumer waste

A major recycling option exists via rebonding if a series of technical and economic conditions are met. If recycling is not possible, scrap or postconsumer PU foam waste can be used for energy recovery or be disposed of at licensed landfill sites or by incineration under controlled conditions in agreement with EU and National regulatory provisions and following advice from the Local Waste Regulation Authority.

3.3 Legislation

Under EU environmental legislation, there are no special requirements for the disposal of conventional PU foam.

14. Transport information

14.1 Transportation

No special steps need to be taken for the transportation of PU foam.

14.2 Labelling

PU foam is not classified for conveyance or supply under the International Agreements on Carriage of Dangerous Goods. The product is not classified as hazardous for any mode of transportation under current EU/UN regulations.

15. Regulatory information

15.1 Product regulatory information

The local legislation is to be followed.

15.1 Important notice

The information included in the Safety Data Sheet is based on our most up-to-date knowledge, and is solely intended to inform regarding aspects of safety; the properties and characteristics indicated herein are not guaranteed.

No liability will be accepted (except as by specified by law) for use of information taken from this safety data sheet. It is the responsibility of the user of this product to observe the rules and regulations.

16. Other information

16.1 Input for external material data systems or PU foam convertors

Flexible polyurethanes are polymers and defined in Data Systems, i.e. IMDS, as a product, not as a chemical compound. In terms of REACH polyurethane foam is defined as article.

For the manufacture of PU foam, a series of raw materials are used. These include isocyanates, polyols (major proportion) and water (small proportion). These ingredients are fully reacted during foam manufacture and chemically converted into the PU polymer matrix. In addition, other essential additives of different characteristics are used in small concentrations, some of which could be also chemically bonded to the matrix.

Depending on the final application, legal requirements or customer's request PU foam may contain any of the following substances:

- Aliphatic and/or cycloaliphatic amine catalysts
- Flame-retardants
- Plasticisers
- Silicone and/or organic surfactants
- Inorganic Tin catalysts
- Organic and/or inorganic pigments.

No detailed breakdown of the finished foam in any of these raw materials or additives can be expressed as final percentages, as most are reactive and chemically bonded to the PU foam matrix or disappear gradually during the curing phase (24h) of the manufacture.

Additives, which prohibit the rebonding recycling route, are not present.

Substances like Hg, Cd, Pb and Cr6+ are not intentionally added to the formulation.

When reporting to customers in the automotive sector the use of IMDS is required.

Besides the material PU Foam, additives are to be reported according to the requirements of GADSL (Global Automotive Declarable Substance List).

16.2 Additional information

This Safety Data Sheet refers specifically to the products listed and can not be used in other products.

Date prepared: 12 February 2015