

SECTION 4 First aid measures.

Description of first aid measures.

In case of contact with the molten product: cool quickly with water and seek medical assistance. Do not attempt to remove resin without health supervision or using solvents but remove the polymer using vegetable oil. In case of contact with condensed fumes, wash the skin with soap and water and if irritation occurs, seek medical assistance.

Most important symptoms and effects, both acute and delayed

Acute effects.

The dust produced during handling and processing may be irritating to the respiratory system. When heated, this polymer can release fumes or vapours that are irritating to the eyes, nose, throat and skin. Over-exposure to them can also cause headaches, nausea, breathing difficulties and coughing. The molten or hot material causes severe burns to skin and unprotected eyes.

SECTION 5 Firefighting measures.

Extinguishing media.

In case of fire, move people away from the area and stay upwind. In case of possible exposure to smoke, vapours or hazardous decomposition products, wear pressurised breathing apparatus with full face protection.

SUITABLE EXTINGUISHING MEDIA

Water spray, CO2 foam, dry chemical foam, powder.

UNSUITABLE EXTINGUISHING MEDIA

Don't use water jets. Direct water jet may spread the material or its decomposition products. Carbon dioxide and foams are not generally recommended because their loss of cooling capacity may result in re-ignition.

Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Hazardous products may develop in case of fire. See section 8 and 10 for further details.

Advice for firefighters.

GENERAL INFORMATION

Cool the containers with water jets to prevent the product from decomposing and potentially harmful substances from developing. Always wear equipment provided with fire-fighting protection devices. Collect fire extinguishing water that must not be discharged into drains. Dispose of the contaminated fire extinguishing water and fire residues according to the standards in force.

EQUIPMENT

Wear normal fire-fighting clothes, such as self-contained, open-circuit compressed air breathing apparatus (EN 137), flame resistant clothing (EN469), fire-fighter gloves (EN 659) and boots (HO A29 or A30).

SECTION 6 Accidental release measures.

Personal precautions, protective equipment and emergency procedures

In case of vapours or powders dispersed in the air, use respiratory protective equipment. These instructions apply to both staff involved in processing and emergency interventions. Remove all sources of ignition (cigarettes, flames, sparks, etc.) or heat from the area where the leak occurred. In case of release of molten product, cool before collecting.

Environmental precautions.

Prevent the product from getting into sewer systems, surface water, phreatic zones.

Methods and material for containment and cleaning up.

Collect the leaked product with mechanical equipment and place it in containers for recovery or disposal.

Spray water to eliminate residue if there are no contraindications.

Ensure adequate ventilation of the area affected by the leak if the product is molten. The disposal of contaminated material must be carried out in accordance with the provisions of point 13.

Reference to other sections.

Any information on personal protection and disposal is provided in sections 8 and 13.

SECTION 7 Handling and storage.

Precautions for safe handling.

Handle the product after having consulted all other sections of this data sheet. Dispose of the product responsibly. Avoid creating dust. Do not eat, drink, or smoke during use.

Dangers arising from improper handling:

Potentially toxic and/or irritating fumes can be released from the heated material. At temperatures $>270^{\circ}\text{C}$ fumes and gases that are irritating to mucous membranes and the membranes of the eyes, mouth, throat and lungs can be released. In addition, phenols or other decomposition products can be generated.

Hazards arising from static electricity:

Static electricity can build up and create hazards while handling the product. To minimise this problem, the systems involved in processing (tanks, filters, mixers, agitators and pneumatic tanker loading systems) may require earthing.

General information about storage:

Treat as a solid fuel. Store away from oxidising materials, in a cool, dry place with adequate ventilation. Earth all transport systems. DO NOT USE OR STORE near sources of heat, sparks or open flames. Leave containers closed when not in use.

Conditions for safe storage, including any incompatibilities.

Keep the product in containers labelled clearly and in well-ventilated places, away from sources of heat or ignition. Store the containers away from any incompatible material; refer to section 10.

SECTION 8 Exposure controls/personal protection.

Control parameters.

While processing the product, dust and some volatile substances (phenols, carbon oxides, acrylonitrile, bisphenol A, monomers, aldehydes, nitrogen compounds) may develop.

In the risk assessment process, it is recommended to consider the occupational exposure limit values foreseen by ACGIH for inert powders not otherwise classified (PNOC respirable fraction: 3 mg/mc; PNOC inhalable fraction: 10 mg/mc). If these limits are exceeded, it is recommended to use a type P filter, the class (1, 2 or 3) of which is chosen based on the result of the risk assessment.

The product contains polymers. The limits of exposure of the monomers that can be released as a result of handling the product are shown below (ACGIH 2014).

Styrene

TWA: 20ppm; 85 mg/m³

STEL: 40ppm; 170 mg/m³

Critical effects: neuropathy; respiratory tract irritation; central nervous system

Butadiene

TWA: 4.4 mg/m³;

Critical effects:

cancer

Acrylonitrile

TWA: 2ppm; 4.3 mg/m³

Critical effects: irritation of the lower respiratory tract; central nervous system

Methyl Methacrylate

TWA: 50ppm; 205

mg/m³ STEL: 100ppm;

410 mg/m³

Critical effects: irritation of the upper respiratory tract and eyes; effects on body mass; pulmonary oedema

Bisphenol A (inhalable powders),

(Italian Legislative Decree No. 81/2008, Annex

XXXVIII) TWA (8 hours): 10mg/m³

The product contains continuous filament glass fibres.

Continuous filament glass fibres are not respirable as defined by the World Health Organization (WHO).

A respirable fibre features a diameter (d) below 3µm, a length (l) greater than 5µm and a l/d ratio greater than or equal to 3. The fibres with a diameter greater than 3µm, which is the case of these continuous filament glass fibres, do not reach the lower airways and therefore do not cause serious pulmonary diseases.

Continuous filament glass fibres do not possess a cleavage plane which would result in a fracture along the length and would involve a reduction of the fibre diameter. If there is a fracture, it takes place transversely, causing the formation of small fibres of shorter length but of the same diameter and some dusts.

In the absence of regulated limits, you can refer to the exposure limits in the workplace provided by ACGIH (2014)

Continuous filament glass fibres

TWA: 1 f/cm³; 5mg/m³ (Italy)

Critical effects: irritation of the upper respiratory tract.

Exposure controls.

Comply with the safety standards when handling chemical substances.

HAND PROTECTION

Unless stated otherwise in the chemical risk assessment, not necessary. Wear suitable gloves for processes in which you might come into contact with the molten material.

SKIN PROTECTION

Unless stated otherwise in the chemical risk assessment, not necessary.

EYE PROTECTION

Unless stated otherwise in the chemical risk assessment, not necessary.

RESPIRATORY PROTECTION

For processes that generate dust, we recommend using a type P filter face mask (ref. standard EN 149) or equivalent device, whose class (1, 2 or 3) and the actual need must be defined according to the outcome of the risk assessment.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions from production processes, including from ventilation equipment, should be controlled with the aim of observing standards on environmental protection.

SECTION 9 Physical and chemical properties.

Information on essential physical and chemical properties.

Appearance	Solid (granules)
Colour	black
Odour	characteristic
Melting point/freezing point.	200 °C (softening)
Flash point.	Not applicable because solid
Relative density.	1.2Kg/l
Solubility	not available.
Partition coefficient: n-octanol/water	not available.
Auto-ignition temperature	> 400 °c.
Decomposition temperature	> 270 °c
Processing temperature	210-250°c

SECTION 10 Stability and reactivity.

Reactivity.

There are no particular risks of reaction with other substances under normal use conditions.

Chemical stability.

The product is stable under normal use and storage conditions.

Possibility of hazardous reactions.

Hazardous reactions under normal use and storage conditions are not predictable.

Conditions to avoid.

Temperatures above 270°C: beyond this temperature the product decomposes, developing dangerous substances.

Incompatible materials.

Strong oxidising and acidic agents.

Hazardous decomposition products

Carbon oxides, monomers, nitrogen compounds, bisphenol A and other hydrocarbons may be released during the thermal process.

SECTION 11 Toxicological information.

No episodes of damage to health due to exposure to the product are known. Nevertheless, use of good industrial hygiene practices is recommended. The product may, in particularly sensitive people, cause minor health effects due to inhalation and/or cutaneous absorption and/or contact with eyes and/or ingestion.

Information on toxicological effects.

a) Acute toxicity

According to the classification criteria of Annex I of EC Regulation 1272/2008, and considering the components, the mixture is not classified for this hazard class.

b) Skin corrosion/irritation.

According to the classification criteria of Annex I of EC Regulation 1272/2008, and considering the components, the mixture is not classified for this hazard class.

If the material is hot, its contact with the skin can cause painful burns, redness, swelling and blistering. The cold product should not cause irritation.

c) Serious damage to eyes/eye irritation.

According to the classification criteria of Annex I of EC Regulation 1272/2008, and considering the components, the mixture is not classified for this hazard class.

If the material is hot, its contact with the eyes can cause burns while the cold product can cause irritation due to the abrasive action of the dust, which can cause scratches on the surface of the eye itself.

d) Respiratory and skin sensitisation.

According to the classification criteria of Annex I of EC Regulation 1272/2008, and considering the components, the mixture is not classified for this hazard class.

e) Germ cell mutagenicity.

According to the classification criteria of Annex I of EC Regulation 1272/2008, and considering the components, the

mixture is not classified for this hazard class.

f) Carcinogenicity.

According to the classification criteria of Annex I of EC Regulation 1272/2008, and considering the components, the mixture is not classified for this hazard class.

g) Reproductive toxicity.

According to the classification criteria of Annex I of EC Regulation 1272/2008, and considering the components, the mixture is not classified for this hazard class.

h) Specific target organ toxicity (STOT) - single exposure.

According to the classification criteria of Annex I of EC Regulation 1272/2008, and considering the components, the mixture is not classified for this hazard class.

i) Specific target organ toxicity (STOT) - repeated exposure.

According to the classification criteria of Annex I of EC Regulation 1272/2008, and considering the components, the mixture is not classified for this hazard class.

j) Aspiration hazard.

According to the classification criteria of Annex I of EC Regulation 1272/2008, and considering the components, the mixture is not classified for this hazard class.

Other information

Inhalation: the product at high temperatures may release potentially hazardous fumes and vapours that are irritating to the respiratory system.

SECTION 12 Ecological information.

Use according to good working practices. Dispose of the product responsibly. Inform the competent authorities in the event the product reaches waterways or sewers or it contaminates soil or vegetation.

Results of PBT and VPVB assessment.

According to the available data, the product does not contain PBT or VPVB substances in percentage higher than 0.1%.

SECTION 13 Disposal considerations.

Waste treatment methods.

Re-use, if possible. The product residues are considered special non-hazardous waste.

The exhaust product must be consigned to an authorised waste disposal company, in compliance with national and local laws. For solid residues consider the possibility of disposal at an authorised landfill.

CONTAMINATED PACKAGES

Contaminated packages must be recovered or disposed of in compliance with waste management national standards.

SECTION 14 Transport information.

UN number.

Not applicable.

UN proper shipping name.

Not applicable.

Transport hazard class(es).

Not applicable.

Packaging group.

Not applicable.

Environmental hazards.

Not applicable.

Special precautions for users.

Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code.

Irrelevant information.

SECTION 15 Regulatory information.

Safety, health and environmental regulations/legislation specific for the substance or mixture
Seveso category:None.

Restrictions relating to the product or to the substances contained according to Annex XVII of EC Regulation 1907/2006.

None.

Substances in Candidate List (Art. 59 REACH):None.

Substances subject to authorisation (Annex XIV - REACH):None.

Substances subject to export notification Reg. (EC) 649/2012:None.

Substances under the Rotterdam Convention Regulations:None.

Substances under the Stockholm Convention Regulations:None.

Healthcare controls.

Information not available

Chemical Safety Assessment

No chemical safety assessment for the mixture and for the substances it contains has been processed.

SECTION 16 Other information.

Key:

- ADF: European agreement concerning the transport of dangerous goods by road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Concentration that gives effect to 50% of the population tested
- CE NUMBER: ESIS (Existing Substances Information System) Identification Number
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level EMS: Emergency Schedule
- GHS: Globally Harmonised System of classification and labelling of chemicals
- IATA DGR: Regulations for the transport of dangerous goods by the International Air Transport Association
- IC50: Immobilisation Concentration 50% of the population tested
- IMDG: International maritime code on the transport of dangerous goods
- IMO: International maritime organization
- INDEX NUMBER: Identification number in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent Bioaccumulative and Toxic according to REACH Regulation
- PEC: Predicted Environmental Concentration
- PEL: Predicted Exposure Level
- PNEC: Predicted No Effect Concentration
- REACH: EC Regulation No.1907/2006
- RID: Regulations for the international carriage of dangerous goods by rail
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term Exposure Limit
- TWA: Time-Weighted Average exposure limit
- VOC: Volatile Organic Compounds
- VPVB: Very Persistent and very Bioaccumulative according to REACH Regulation
- WGK: German water hazard class.

GENERAL BIBLIOGRAPHY:

Regulation (EC) 1907/2006 of the European Parliament (REACH)

1. Regulation (EC) 1272/2008 of the European Parliament (CLP)
2. Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
3. Regulation (EC) 2015/830 of the European Parliament
4. Regulation (EC) 286/2011 of the European Parliament (II Atp. CLP)
5. Regulation (EC) 618/2012 of the European Parliament (III Atp. CLP)
6. Regulation (EC) 487/2013 of the European Parliament (IV Atp. CLP)
7. Regulation (EC) 944/2013 of the European Parliament (V Atp. CLP)
8. Regulation (EC) 605/2014 of the European Parliament (VI Atp. CLP) the Merck Index. - 10th Edition

Handling Chemical Safety

INRS - Fiche Toxicologique (toxicological sheet)

Patty - Industrial hygiene and toxicology

N.I. Sax - dangerous properties of Industrial materials-7, 1989

edition ECHA Agency Website

Note for the user:

The information contained in this data sheet is based on the knowledge available to us when the latest version was issued. Users must make sure the information is suitable and exhaustive in relation to the specific use of the product.

This document must not be considered a guarantee on any specific property of the product.

As the use of this product is not subject to our direct control, users must comply, under their own responsibility, with current hygiene and safety laws and provisions. We accept no responsibility for improper use.

Provide suitable information to the personnel in charge of using chemicals.

This document replaces the previous version no. 5 dated 09/04/2015, which has been revised in all sections.