

Safety Data Sheet

Printing date 14.11.2018

Revision: 14.11.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

- Trade name: **EDISTIR HIPS**
- Registration number: Not applicable
- Chemical name: Polystyrene modified with elastomers (HIPS).
- (e-)SDS code: 1788

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

- Application of the substance / the mixture: Production of various plastic final applications.
- Uses advised against: Not determined.

1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier: Versalis S.p.A.
Piazza Boldrini, 1
I-20097 San Donato Milanese (MI)
N° telefono: +39 02 520 1
- E-mail address of the competent person responsible for the SDS: e-mail: SDS.versalis@versalis.eni.com
- 1.4 Emergency telephone number:** S.E.T. (24h): Italy 800 452 661; other countries +39 (0)362512868.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification according to Regulation (EC) No 1272/2008: Based on the requirements of the CLP Regulation, the product is not classified.

2.2 Label elements

- Labelling according to Regulation (EC) No 1272/2008: Not applicable
- Hazard pictograms: Not applicable
- Signal word: Not applicable
- Hazard statements: Not applicable

2.3 Other hazards

- Results of PBT and vPvB assessment
- PBT: This substance / mixture is not a PBT applying the criteria of REACH Regulation, Annex XIII.
- vPvB: This substance / mixture is not a vPvB applying the criteria of REACH Regulation, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

- Description: Mixture, composed of a copolymer and of substances below the applicable classification limits or not dangerous.
Copolymer: styrene-butadiene, CAS: 9003-55-8.

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· Dangerous components: Not applicable

* SECTION 4: First aid measures

· 4.1 Description of first aid measures

- General information: No special measures required.
- After inhalation: Dust or gas/vapours released by heat: move the affected person away from the contaminated area into fresh air; seek medical assistance.
- After skin contact: In case of contact with melted material, cool down with cold water and seek medical assistance. Do not remove the product that solidified on skin. Treat as a burn.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: No specific measure requested in case of ingestion. If needed seek medical assistance.

· 4.2 Most important symptoms and effects, both acute and delayed

Dust or gas/vapours released by heat: irritation of the respiratory organs. Eyes reddening.

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

No further relevant information available.

* SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· Suitable extinguishing agents: Water, water spray, foam, dry chemicals, carbon dioxide.

· For safety reasons unsuitable extinguishing agents:

Not applicable.

· 5.2 Special hazards arising from the substance or mixture

Combustion products: carbon dioxide, carbon monoxide (when starved of air / oxygen), and possible unburned hydrocarbons. Overheating/pyrolysis may evolve vapours made up of monomers, low molecular weight polymers and their oxidation products.

· 5.3 Advice for firefighters

- Protective equipment: Wear suitable protective clothing (helmet, goggles, fire resistant gloves, boots) and protect respiratory organs (self contained breathing apparatus).
- Additional information: The product is combustible.
Cool endangered receptacles with water spray.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Do not walk on granules to avoid slipping.

· 6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

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· **6.3 Methods and material for containment and cleaning up:**

Collect mechanically. Reuse if possible or dispose of as required by national and local regulations (see section 13).

· **6.4 Reference to other sections**

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
For information on disposal of contaminated material, see section 13.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

During the processing of the product, avoid inhalation of fumes or powders, by providing good ventilation of the workroom and, if necessary, by a suitable exhaust system.

Powder formation by abrasion must be avoided during handling and transportation, especially when unloading; if such formation occurs, the powder must be eliminated immediately.

In normal conditions masks with antidust filters should be available for use when requested.

· Information about fire - and explosion protection:

The product is a poor conductor and it is likely to accumulate electrostatic charges. Precautions normally used for not conductive materials and against the accumulation of electrostatic charges should be used during processes which employ powdered materials or produce dust (e.g.: reduce speed to the minimum, install earthing systems, the absolute prohibition to smoke and use free flames, use inert gases in mills and in the closed systems).

· General recommendations on workplace hygiene

Apply the normal personal hygiene measures, in particular do not eat, drink or smoke while handling.

· **7.2 Conditions for safe storage, including any incompatibilities**

· Storage:

· Requirements to be met by storerooms and receptacles:

Store the product in a covered place in its sealed packaging, away from direct sunlight and heat sources.

Ensure the proper ventilation in all storage areas.

Earth storage silos as precautionary measure against the static electricity build-up.

· Information about storage in one common storage facility:

Not required.

· Further information about storage conditions:

Product should be stored in a safe manner, to avoid danger from unstable or damaged packaging units (octabins/bags/boxes on pallet). In particular, stacking of packaged units can be dangerous to warehouse personnel.

In storage and working areas avoid pellets spilling as a possible cause of slipping.

· **7.3 Specific end use(s)**

No further relevant information available.

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SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- **8.1 Control parameters**
- Ingredients with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **8.2 Exposure controls**
- General protective and hygienic measures: Traces of monomers and other volatile substances may be given off during processing, particularly at unusually high processing temperatures.
Work rooms must be provided with adequate ventilation and exhaust equipment to collect dust and gas/vapours that may be evolved during the conversion.
- Suitable technical controls: Ensure good ventilation / exhaustion at the workplace.
- Personal protection measures: The personal protective equipment will vary according to the possible exposure and danger of working conditions.
- Respiratory protection: In normal conditions masks with antidust filters should be available for use when requested.
- Protection of skin
- Protection of hands: Protective gloves
- Eye/face protection: Not necessary when no powders or vapours are present. Where present, wear suitable protective glasses.
- Other: Standard work clothes.
- Thermal dangers: No information available
- Limitation and supervision of exposure into the environment: No information available.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- General Information
- Appearance:
 - Form: Granulate
 - Colour: White
- Odour: Odourless
- Odour threshold: Not determined.
- pH-value: Not applicable.
- Change in condition
 - Melting point/freezing point: >94 °C
 - Initial boiling point and boiling range: Undetermined.
- Flash point: Not applicable.
- Flammability (solid, gas): Product is not flammable.

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· Ignition temperature:	>300 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Not determined.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure:	Not applicable.
· Density at 20 °C:	1.04 g/cm ³
· Bulk density at 20 °C:	650 kg/m ³
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Insoluble.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity	The product does not participate to dangerous reactions if stored and handled as prescribed/indicated
· 10.2 Chemical stability	
· Thermal decomposition:	Prevent the formation of noxious gases and vapours by using the advised conversion conditions. Stable in the normal storage conditions.
· 10.3 Possibility of hazardous reactions	No dangerous reactions known.
· 10.4 Conditions to avoid	Exposure to sunlight and/or heat. Buildup of electrostatic charges.
· 10.5 Incompatible materials:	Avoid the contact with oxidising substances.
· 10.6 Hazardous decomposition products:	No dangerous decomposition products known.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects	
· Acute toxicity	Based on available data, the classification criteria are not met.
· Primary irritant effect:	
· Skin corrosion/irritation	Based on available data, the classification criteria are not met.
· Serious eye damage/irritation	The product's dust may cause irritation of eyes.
· Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.

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- Additional toxicological information: The product does not present any intrinsic health hazard when processed according to correct working procedures. Specific information on the product is not available in the literature. Residual monomers may be present in the product at trace levels, hindered in the polymer matrix and therefore not available in normal conditions.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) No evidence of these effects has been reported.
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- Aquatic toxicity: No further relevant information available.
- **12.2 Persistence and degradability** The product is essentially a high molecular weight polymer, not regarded as ecotoxic.
- Other information: The product is a non biodegradable polymer.
- **12.3 Bioaccumulative potential** Does not accumulate in organisms
- **12.4 Mobility in soil** No further relevant information available.
- Additional ecological information:
- General notes: Use according to good working practice, and avoid releasing the product into the environment.
- **12.5 Results of PBT and vPvB assessment**
- PBT: This substance / mixture is not a PBT applying the criteria of REACH Regulation, Annex XIII.
- vPvB: This substance / mixture is not a vPvB applying the criteria of REACH Regulation, Annex XIII.
- **12.6 Other adverse effects** No further relevant information available.

* SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- Recommendation: The same safety considerations that apply to the product as it is, apply to scraps/waste as well. The incineration must be done under approved conditions, possibly with energy recovery and only at suitable facilities equipped with a scrubber for the treatment of fumes before their release into the atmosphere. Landfilling should be avoided as far as possible. If unavoidable, use approved landfill sites.

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Residues should be disposed of as required by national and local regulations.

- Uncleaned packaging:
 - Recommendation:
 - Recommended cleansing agents:
- Disposal must be made according to official regulations.
Not applicable.

SECTION 14: Transport information

- **14.1 UN-Number**
ADR/RID/ADN, ADN, IMDG, IATA Not applicable
- **14.2 UN proper shipping name**
ADR/RID/ADN, ADN, IMDG, IATA Not applicable
- **14.3 Transport hazard class(es)**
ADR/RID/ADN, ADN, IMDG, IATA
Class Not applicable
- **14.4 Packing group**
ADR/RID/ADN, IMDG, IATA Not applicable
- **14.5 Environmental hazards:**
Marine pollutant: No
- **14.6 Special precautions for user** Not applicable.
- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.
- Transport/Additional information: The product is not classified as dangerous for transportation according to the following regulations: ADR/RID, IMO, IATA.

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- National regulations: Not applicable
- Regulations of the European Union: Not applicable
- **15.2 Chemical safety assessment:** Assessment not required.

* SECTION 16: Other information

- Department issuing SDS: SRBS/PSEC
- Abbreviations and acronyms:
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 - IMDG: International Maritime Code for Dangerous Goods
 - IATA: International Air Transport Association
 - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 - EINECS: European Inventory of Existing Commercial Chemical Substances
 - ELINCS: European List of Notified Chemical Substances

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CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.

Data and information contained in this Safety Data Sheet are based on our available knowledge at the last revision date. No guarantee can be given as to the sufficiency of any safety measures contained in this Safety Data Sheet, nor can it be assumed that other or additional measures may not be required under particular or exceptional circumstances. The user must make sure of the fitness and completeness of the information, according to the specific use they want to do.