

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

1.1 Product identifier

- Trade name: **EDISTIR HIPS**
- Registration number: N.A.
- 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: N.A.

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:

CNIT - Centro Nazionale di Informazione Tossicologica (24h):
(+39) 0382 24444

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
- Hazard pictograms
- Signal word
- Hazard statements

not applicable
not applicable
not applicable
not applicable

2.3 Other hazards

- Results of PBT and vPvB assessment
- PBT:
- vPvB:

This substance / mixture does not meet the criteria of REACH Regulation, Annex XIII, for identification of PBT substances.
This substance / mixture does not meet the criteria of REACH Regulation, Annex XIII, for identification of vPvB substances.

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.

- Dangerous components:

not applicable

SECTION 4: First aid measures

4.1 Description of first aid measures

- General information:

No special measures required.

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- 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: N.A.
- **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 evolves 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.
- **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.

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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.

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.

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8.2 Exposure controls

<ul style="list-style-type: none"> · General protective and hygienic measures: · Suitable technical controls · Personal protection measures · Respiratory protection: · Protection of skin · Protection of hands: · Eye/face protection: · Other: · Thermal dangers · Limitation and supervision of exposure into the environment 	<p>Traces of monomers and other volatile substances may be given off during processing, particularly at unusually high processing temperatures.</p> <p>Work rooms must be provided with adequate ventilation and exhaust equipment to collect dust and gas/vapours that may be evolved during the conversion.</p> <p>Ensure good ventilation / exhaust at the workplace.</p> <p>The personal protective equipment will vary according to the possible exposure and danger of working conditions.</p> <p>In normal conditions masks with antidust filters should be available for use when requested.</p> <p>Protective gloves</p> <p>Not necessary when no powders or vapours are present. Where present, wear suitable protective glasses.</p> <p>Standard work clothes.</p> <p>No information available</p> <p>No information available.</p>
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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/Melting range:	>94 °C
Boiling point/Boiling range:	Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Product is not flammable.
· Ignition temperature:	>300 °C
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	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

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· 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.
· 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.

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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 does not meet the criteria for PBT REACH Regulation, Annex XIII.
- vPvB: This substance / mixture does not meet the vPvB criteria of REACH, 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 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.
After suitable treatment (cleaning, grinding, etc.), the product can be safely re-used, as is or mixed with fresh material, when this is compatible with the intended final application.
Landfilling should be avoided as far as possible. If unavoidable, use approved landfill sites.
Residues should be disposed of as required by national and local regulations.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Not applicable.

SECTION 14: Transport information

- **14.1 UN-Number**
- ADR,RID, ADN, IMDG, IATA not applicable
- **14.2 UN proper shipping name**
- ADR,RID, ADN, IMDG, IATA not applicable
- **14.3 Transport hazard class(es)**
- ADR,RID, ADN, IMDG, IATA not applicable
- Class not applicable
- **14.4 Packing group**
- ADR,RID, IMDG, IATA not applicable

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- **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.
- UN "Model Regulation": UN-, -

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:** Assesment not required.

* SECTION 16: Other information

- Department issuing SDS: QHSE/PRST
- 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)
 - 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
 - CAS: Chemical Abstracts Service (division of the American Chemical Society)
 - LD50: Lethal dose, 50 percent
 - PBT: Persistent, Bioaccumulative and Toxic
 - vPvB: very Persistent and very Bioaccumulative
 - DNEL: Derived No-Effect Level (REACH)
 - PNEC: Predicted No-Effect Concentration (REACH)
 - LC50: Lethal concentration, 50 percent
 - SVHC: Substances of Very High Concern
- * 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.

