



Safety Data Sheet

1. Identification of the Substance/Preparation and of the Company/Undertaking

Identification of the Substance or Preparation

Product Name : HUSHLLOY

Grade Name : HS200

Use of the substance/preparation: The plastic materials of the uses such as a household appliance use, electronic materials and industrial materials

Company/Undertaking Identification

Name of Manufacturer : Techno Polymer Co.,Ltd.

Address : 100,Kawajiri-cho,Yokkaichi,Mie,510-0871,Japan

Name of department in charge : Technology Dept.

Where to make contact : Quality Control Group

In case of emergencies Phone Number 81-59-348-3119

Fax. Number 81-59-348-3128

URL www.techpo.co.jp/

Date Prepared : Jul. 1. 2012

Date Revised : .

2. Hazards Identification

This product is not classified as dangerous according to Directive 1999/45/EC/ and its amendments.

Classification : Not Applicable

Most important hazards

Physical and Chemical hazards : Not Applicable

Adverse human health effects : Not Applicable

Environmental effects : Not Applicable

3. Composition/Information on Ingredients

Chemical name : (A) Polycarbonate
(B) Acrylonitrile-Butadiene-Styrene Copolymer
(C) Special Styrene Copolymer

EC No. : Not Applicable

CAS No. : (A) 25971-63-5 (B) 9003-56-9 (C) Registered

4. First Aid Measures

Immediate medical attention: Depending on a symptom, refer to the following items mentioned.

Inhalation : Judging from the shape, it is unlikely that the pellets will be inhaled.

In case lots of fumes generated from high temperature molten resins are inhaled, move to a place having fresh air.

In case of coughs or difficulty in respiration, receive the treatment of a physician.

Skin contact : Wash with water. If condensates of gas generated from the substance molten at high temperature come into contact with the skin, wash well with soapy water.

Eye contact : When it enters the eyes, if the eyes are rubbed, it may cause irritation or injure the cornea. Thus, wash with water without rubbing.

Remove contact lenses immediately.

In case of any abnormalities, receive the treatment of a physician.

Ingestion : Although this is unlikely to happen, there is no acute toxicity even if it is swallowed. In case large amount of it is swallowed, receive the treatment of a physician.

Notes to physician: Depending on a symptom, receive the appropriate treatment of a physician



5. Fire-Fighting Measures

Suitable extinguishing media: Water, water spray, and various kinds of fire-extinguishers may be used.

Extinguishing media which shall not be used for safety reasons :

It needs to take attention because carbon dioxide and dry chemical extinguisher have little ability for cooling, and there might be re-ignition.

Specific exposure hazards : At the time of fire, high heat as well as gases containing dense black smoke, carbon dioxide, carbon monoxide, nitrogen oxides, etc. are generated.

Special protective equipment for firefighters :

At the time of fire-fighting, wear proper protective clothing and respirators.

6. Accidental Release Measures

Personal precautions :In case it is spilled on the road or floor, there is danger of slipping and falling.

Thus, collect the spilled pellets, and dispose of them.

Environmental precautions :If it is accidentally released, it may cause environmental contamination, so immediately collect all that have been released.¹⁾

Methods for cleaning up :Sweep up the spilled pellets and collect them to a sealed container.

7. Handling and Storage

Handling : The gas generated at the time of processing may irritate the respiratory organs and skin, and when inhaled in large amount, vomiting and headaches may occur in certain individuals. Thus, avoid inhalation of such gases.

In the case of mechanical processing (cutting, sanding, etc.), the fine dust generated by crushing may cause dust explosion by the static electricity and electrical sparks that are generated. Thus, aim at keeping the work place clean so that dust will not accumulate.

Storage : Store in a place which is not exposed to the direct rays of the sun, and keep away from heat or ignition sources.

In the case of handling or storage of this material in one place, observe all applicable national or regional laws and regulations about domestic fire prevention.

Specific uses:Take notice of the directions of use on the label.

8. Exposure Control/ Personal Protection

Exposure limit values : Neither Japan Association of Industrial Health nor ACGIH specifies the tolerable concentration of ABS resin dust, but it is believed that following values are reasonable guidelines for operation.

	Time Weighted Average Value	
	Inhalable Dust	Total Dust
Recommendation Value of Japan Assc. Of Industrial Health (2008) Class 3 Dust	2mg/m ³	8mg/m ³
Recommendation Value of ACGIH (2008) (Respirable Particulate)	3mg/m ³	10mg/m ³

Exposure controls

Occupational exposure controls:

At the time of processing in high temperature, gas will be generated from the portion open to the atmosphere. Thus, in order to obtain comfortable work environment, it is desirable to install local ventilation.

Personal protection equipment

Respiratory protection : In the case of work which generates dust such as mechanical processing or sanding of resin products, dust respirator shall be worn.



In case work is done in a place having high concentration of generated gases or fumes, a chemical cartridge respirator (for organic chemicals) shall be worn.

Hand protection : When handling molten resins, gloves having good thermal Insulation shall be worn.

Eye protection : In the case of work which generates dust such as mechanical processing or sanding of resin products, protective goggles made of plastics shall be worn.

Skin and body protection : Ordinary work clothing will do, but in case of handling molten resins, work clothing having long sleeves shall be worn.

Environmental exposure controls: No information

9. Physical and Chemical Properties

General information

Appearance : Pellet Form Solids
 Odour : None (room temperature)

Important health, safety and environmental information

pH : Not Available
 Boiling point/range : None
 Flash point : Not Available
 Flammability(solid,gas) : Not Available
 Explosive properties : Lower explosion limit ; 60g/m³ (in case material is in powder form)
 Upper explosion limit ; Not Available
 Oxidising properties : None as far as ordinary storage and handling are concerned.
 Vapour pressure : None
 Relative density : 1.08-1.18 g/cm³
 Solubility : Water solubility ; Insoluble
 Others; Partly soluble in Methyl Ethyl Ketone, Toluene Tetra Hydro Furan and O-Dichloro Benzene
 Partition coefficient(n-octanol/water): Not Available
 Viscosity : Not Available
 Vapour density : Not Available
 Evaporation rate : None

Other information

Melting point/range : There is no definite melting point and it becomes soft gradually over a broad range (130°C-150°C).

Auto ignitability : Auto ignition Temperature ; Approx. 405°C(ASTM D1929-77)
 Reactivity with Water ; None

10. Stability and Reactivity

Stability : None as far as ordinary storage and handling are concerned.
 Conditions to avoid : Direct rays of the sun, heat and ignition sources.
 Materials to avoid : None
 Hazardous decomposition products:
 At the time of fire, high heat as well as gases containing dense black smoke, carbon dioxide, carbon monoxide, nitrogen oxides, etc. are generated.

Self-reactivity/Explosiveness:
 Although there is no self-reactivity at normal temperature, when the temperature becomes high (250-400°C), the resin decomposes, and generates decomposed gases.
 Thus, the molten resin shall be cooled rapidly with water.

Dust explosiveness : Explosive
 Others : Not Specified



11. Toxicological Information

(1)Product (substance or preparation)

Acute toxicity (oral)	: Oral LD ₅₀ (Rat) > 5000mg/kg (Assumed Value)
Acute toxicity (skin/dermal)	: No Information
Acute toxicity (gas)	: No Information
Acute toxicity (vapour)	: No Information
Acute toxicity (dust, mist)	: No Information
Skin corrosion/irritation	: There is physical irritability. The gas and the fume generated when drying and melting stimulate its skin.
Serious eye damage/eye irritation	: There is physical irritability. The gas and the fume generated when drying and melting stimulate its eye.
Respiratory sensitizer	: No Information
Skin sensitizer	: No Information
Germ cell mutagenicity	: No Information
Carcinogenicity	: No Information
Toxic to reproduction	: No Information
Specific target organ systemic toxicity following single exposure	: No Information
Specific target organ systemic toxicity following repeated exposure	: No Information
Aspiration hazard	: No Information
Others (Includes generation of toxic gases by reaction with water, etc.)	: Not Specified

(2)Hazard ingredient (If the hazards of the product are “Not classified” or “Classification not possible”, the hazards of the ingredients are not listed.)
None

12. Ecological Information

(1) Product (substance or preparation)

Ecotoxicity

Acute hazards to the aquatic environment	: No Information
Chronic hazards to the aquatic environment	: No Information

Mobility : No Information

Persistence and degradability : None

Bioaccumulative potential : No information

Other adverse effects : In order to prevent the marine animals and birds from ingesting it, it just not be abandoned or dumped in any ocean or water area.

(2)Hazard ingredient (If the hazards of the product are “Not classified” or “Classification not possible”, the hazards of the ingredients are not listed.)
None

13. Disposal Considerations

It shall be handled in accordance with Directives 91/156/EEC, 94/62/EC, the national or regional laws, rules and ordinances related to the disposal of waste matters.

14. Transport Information

UN number : Not Applicable

UN class : Not Applicable

Proper shipping name : Not Applicable

Packing group : Not Applicable

Marine pollutant : Not Applicable

Other applicable information: Avoid wetting or rough handling so that the packaging will not be damaged.

In case the bags are damaged and the pellets are scattered, pay attention so that no one will slip and fall. All of the materials that have spilled shall be rapidly collected.

**15. Regulatory Information**

This product is not classified as dangerous according to Directives 67/548/EEC and 1999/45/EC.

Information on the label

Symbol	: None
Physical and Chemical hazards	: Not Applicable
Adverse human health effects	: Not Applicable
Environmental effects	: Not Applicable

16. Other Information

R-phrases : None
S-phrases : None

References:

1. Manual for Preventing the Discharging of Resin Pellets / Japan Plastics Industry Federation, June 1993
 2. Prevention of dust explosion / Technology Institution of Industrial Safety, November 1983
 3. Homepage of the Ministry of Health, Labour and Welfare
 4. Homepage of the National Institute of Technology and Evaluation
 5. Homepage of the Japan Styrene Industry Association
 6. 15107 chemical articles / The Chemical Daily, 2007
 7. EU Directive 1999/45/EC of the European Parliament and of the Council (the third edition) / Japan Chemical Industry Ecology-Toxicology & Information Center, April 2008
 8. Guide to the compilation of Safety Data Sheets, ANNEX II of REACH official journal, May 2007
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The information described herein was prepared on the basis of the materials, information, and data available at the present time, and the above information may be revised by new knowledge.

The precautionary items were based on ordinary handling. In case of special handling, safety measures in compliance with the application and usage shall be executed.

The above was given as information, and no guarantee, express or implied, is made.

Final determination of safety and suitability of any material is the sole responsibility of the keeper and user. All materials may present unknown hazards, and therefore should be handled with adequate caution. Although certain hazards are described herein, they may not be the only hazards in relation to the products.
