

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 4/30/2021 Revision date: 2/14/2025 Version: 3.0

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

#### 1.1. Product identifier

Product form : Substance

Trade name : TPSC Asia Polystyrene Impact (HIPS)

Product code : Grades: 2451 / 2551 / 3241 / 3341 / 3351 / 4440 / 5331 / 6351 / 8265

Other means of identification : CAS No.: 9003-55-8

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

#### 1.2.1. Relevant identified uses

Use of the substance/mixture : Extrusion, Injection and Other Purposes

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

TPSC Asia Pte Ltd

53 Tuas Crescent, Singapore 638732

T (65) 6862 1228 - F (65) 6862 3179

#### 1.4. Emergency telephone number

Emergency number : 6596576445

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

#### Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

### 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

#### 2.3. Other hazards

No additional information available

# **SECTION 3: Composition/information on ingredients**

# 3.1. Substances

Name : TPSC Asia Polystyrene Impact (HIPS)

Name	Product identifier	%
Styrene-butadiene copolymer	CAS-No.: 9003-55-8 EC-No.: 618-370-2	>= 88
1,3-Butadiene, homopolymer	CAS-No.: 9003-17-2 EC-No.: 618-356-6	2 – 12

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#### 3.2. Mixtures

Not applicable

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Allow affected person to

breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water,

followed by warm water rinse. Wash skin with plenty of water.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness

persists. Rinse eyes with water as a precaution.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison

center or a doctor if you feel unwell.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

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

Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder, Carbon dioxide, Water spray, Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : On combustion forms:

Hazardous decomposition products in case of fire : Toxic fumes may be released.

# 5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection.

Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

# 6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment. For further information refer to section

8: "Exposure controls/personal protection".

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel.

# 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew

with proper protection. For further information refer to section 8: "Exposure

controls/personal protection".

Emergency procedures : Ventilate area.

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#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. On land, sweep or shovel into suitable containers.

Minimise generation of dust. Store away from other materials.

: Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13: "Disposal considerations"

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Wear personal protective equipment. Provide good ventilation in process area to prevent formation of vapour.

Hygiene measures

Other information

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

# 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Keep container tightly closed in a cool, well-ventilated place. Keep container closed when not in use. Store in a well-ventilated place. Keep cool.

#### 7.3. Specific end use(s)

No additional information available

# SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.1.1. National occupational exposure and biological limit values

No additional information available

#### 8.1.2. Recommended monitoring procedures

No additional information available

# 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

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#### 8.2.2.1. Eye and face protection

#### Eye protection:

Chemical goggles or safety glasses. Use eye protection according to EN 166. Safety glasses

#### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear suitable protective clothing

#### Hand protection:

Wear protective gloves. Wear suitable gloves tested to EN374

#### 8.2.2.3. Respiratory protection

#### Respiratory protection:

Wear appropriate mask

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

#### Other information:

Do not eat, drink or smoke during use.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state Colour : Milky white. Appearance : Pellets. Odour : faint. Odour threshold : Not available Melting point : Not available Freezing point : Not applicable **Boiling point** : Not available : Non flammable. Flammability

Explosive limits : 0.015 (for polymer dust <  $63 \mu m$ )

: Not applicable Lower explosive limit (LEL) : Not applicable Upper explosive limit (UEL) : Not applicable Flash point Auto-ignition temperature : Not applicable Decomposition temperature : Not available : Not available pH solution : Not available Viscosity, kinematic : Not applicable Solubility : Not available Partition coefficient n-octanol/water (Log Kow) : Not available : Not available Vapour pressure Vapour pressure at 50 °C : Not available : Not available Density : Not available Relative density Relative vapour density at 20 °C : 1030 to 1060 kg/m<sup>3</sup> Particle size : Not available

Relative density : Not available
Relative vapour density at 20 °C : 1030 to 1060 k
Particle size : Not available
Particle size distribution : Not available
Particle shape : Not available
Particle aspect ratio : Not available
Particle aggregation state : Not available
Particle agglomeration state : Not available
Particle specific surface area : Not available
Particle dustiness : Not available

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#### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Combustible if exposed to flames.

#### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

# 10.3. Possibility of hazardous reactions

Dust may form an explosive mixture with air, ignited by sparks or sources of ignition.

#### 10.4. Conditions to avoid

Avoid proximity or contact with flames or sparks avoid overheating the product.

Do not heat to temperatures exceeding 250 °C

Keep away from light.

IARC group

#### 10.5. Incompatible materials

Avoid contact with strong oxidizing materials.

#### 10.6. Hazardous decomposition products

Complete combustion, with an excess of oxygen forms: carbon dioxide (CO2) and water vapour. partial combustion, forms also: carbon monoxide (CO), soot and cracked products: aldehydes, ketones ...

# **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)

# Styrene-butadiene copolymer (9003-55-8)

Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)

3 - Not classifiable

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#### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

No additional information available

#### 11.2.2. Other information

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Hazardous to the aquatic environment, short-term

: Not classified (Based on available data, the classification criteria are not met)

Hazardous to the aquatic environment, long-term

: Not classified (Based on available data, the classification criteria are not met)

(chronic)

#### 12.2. Persistence and degradability

#### **TPSC Asia Polystyrene Impact (HIPS)**

Persistence and degradability

Not established.

#### 12.3. Bioaccumulative potential

# **TPSC Asia Polystyrene Impact (HIPS)**

Bioaccumulative potential Not established.

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

Additional information : Avoid release to the environment.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations

: Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials

: Avoid release to the environment.

# **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

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ADR	IMDG	IATA	ADN	RID
14.2. UN proper shippin	g name			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard	class(es)			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental haz	zards			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

#### 14.6. Special precautions for user

#### **Overland transport**

Not regulated

#### Transport by sea

Not regulated

#### Air transport

Not regulated

#### Inland waterway transport

Not regulated

### Rail transport

Not regulated

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

# **SECTION 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

# 15.1.2. National regulations

# Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)

Observe restrictions according Act on the Protection of Young People in Employment

(JArbSchG)

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netnerlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed SZW-lijst van mutagene stoffen : None of the components are listed

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NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid

: None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling

: None of the components are listed

# 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

# **SECTION 16: Other information**

Abbreviations and acronyms		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	

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Abbreviations and acronyms	
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Sources of Key data : <a href="https://echa.europa.eu/">https://echa.europa.eu/</a>

LOLI database

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.