

## 1. Identification of the substance/mixture and of the company/undertaking

### Product identifier

Trade name: Terluran® ABS Granulate, Natural

This safety data sheet pertains to the following products:

Terluran® BX19000  
Terluran® EGP-7  
Terluran® GP-22 G4  
Terluran® GP-22 NR  
Terluran® GP-22 Q551  
Terluran® GP-22 Q552  
Terluran® GP-25 NR  
Terluran® GP-35 NR  
Terluran® HG-26  
Terluran® HI-10 NR  
Terluran® HI-10 Q483  
Terluran® HI-10 Q520 NR  
Terluran® HI-10 Q551  
Terluran® HI-12 NR  
Terluran® Nano

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

General use: Polymer  
For industrial processing only

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

Company name: INEOS Styrolution APAC Pte Ltd.  
Street/POB-No.: 111 Somerset Road  
Postal Code, city: #08-01/02 TripleOne Somerset, SG  
Singapore 238164  
WWW: www.styrolution.com  
E-mail: INSTY.asia@ineos.com  
Telephone: +65 6933 8350  
Telefax: +65 6933 8355

Department responsible for information:  
Infopoint, Telephone: + 65 (0) 6933 - 8372  
E-mail: INSTY.asia@ineos.com

### Emergency telephone number

Telephone: +86 512 8090 3042 (Country); + 65 3158 1074 (regional)

## 2. Hazards identification

### Classification of the substance or mixture

#### GHS classification

This mixture is classified as not hazardous.

### Label elements

Hazard statements: not applicable

Precautionary statements: not applicable

### Other hazards

Dust: Can cause skin, eye and respiratory tract irritation.  
 Fine dust: May form explosible dust-air mixture if dispersed.  
 In case of dust formation: Particular danger of slipping on spilled product on the ground.  
 The melted product can cause severe burns.  
 Swallowing may cause gastrointestinal irritation and pain of guts.

## 3. Composition/information on ingredients

### Mixtures

Chemical characterisation: Polymer mixture:

CAS No. 9003-56-9: > 98 % Styrene-acrylonitrile-butadiene copolymer

CAS No. 100-42-5: < 0.1 % Styrene

Additional information: The product does not contain dangerous substances above limits that need to be mentioned in this section according to applicable legislation.

## 4. First aid measures

General information: Immediately remove any contaminated clothing, shoes or stockings.

In case of inhalation: Provide fresh air. Put victim at rest and keep warm. Seek medical attention

Following skin contact: The melted product can cause severe burns.  
 Do not attempt to remove molten product, or molten product that has cooled, from skin without medical assistance.  
 After contact with molten product, cool skin area rapidly with cold water. Consult physician.

After eye contact: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do.  
 Continue rinsing.  
 Consult an eye specialist in the event of irritation.

After swallowing: Rinse mouth with water. Drink one or two glasses of water.  
 Never give an unconscious person anything through the mouth. seek medical attention

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

Dust: Skin irritation, Eye irritations and redness

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

Treat symptomatically.  
 Decontamination, vital functions

## 5. Firefighting measures

### Extinguishing media

Suitable extinguishing media:

Water spray jet, foam, extinguishing powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

## Special hazards arising from the substance or mixture

In case of fire may be liberated: carbon monoxide and carbon dioxide (CO<sub>2</sub>).

In case of dust formation (Fine dust): May form explosible dust-air mixture if dispersed.

## Advice for firefighters

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Do not allow fire water to penetrate into surface or ground water. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation.

Wear personal protection equipment. Do not breathe dust.

### Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

### Methods and material for containment and cleaning up

Avoid generation of dust. Remove all sources of ignition.

Take up mechanically. Collect in closed containers for disposal.

Additional information:

Special danger of slipping by leaking/spilling product.

## 7. Handling and storage

### Precautions for safe handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe dust.

In the case of the formation of dust: Withdraw by suction.

Molten material: Avoid contact with the substance.

Precautions against fire and explosion:

Take precautionary measures against static discharges. Keep away from sources of ignition. Use grounding equipment. Use explosion-proof equipment and non-sparking tools/utensils. Avoid open flames.

May form explosible dust-air mixture if dispersed.

### Storage

Requirements for storerooms and containers:

Store in a well-ventilated place. Keep container tightly closed.

Protect against heat /sun rays. Protect from moisture contamination.

## 8. Exposure controls/personal protection

### Control parameters

Additional information: The product contains very low levels of residual monomers and process chemicals (mainly styrene and ethylbenzene and very low levels of acrylonitrile, vinylcyclohexene, butadiene) that may be evolved during thermal processing, along with possible decomposition products. As the identity and levels of these impurities evolved will depend upon the processing conditions (temperature etc.) it is the responsibility of the user to determine the adequacy of any protection or safety measures.

### Exposure controls

Provide good ventilation in the work area. Additional controls are not normally necessary when handling the polymer.

Thermal extrusion: Provide local exhaust ventilation to ensure that the workplace exposure limit is not exceeded.

Use of respiratory protection may be necessary during maintenance activities.

See also information in chapter 7, section storage.

### Personal protection equipment

#### Occupational exposure controls

Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded. Use filter type A-P2 according to EN 14387.

Hand protection: Protective gloves according to EN 374.  
Protective gloves made of fabric or leather  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.  
In case of melting: Impervious heat protective gloves according to EN 407  
Glove material: Leather  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to EN 166.

Body protection: Wear suitable protective clothing. Boots or safety shoes.

General protection and hygiene measures:

Molten material: Avoid contact with skin.

Avoid breathing dust and vapours. Keep away from sources of ignition.

Wash hands before breaks and after work.

In case of dust formation: Particular danger of slipping on spilled product on the ground.

### Environmental exposure controls

Do not allow to penetrate into soil, waterbodies or drains.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance: Physical state at 20 °C and 101.3 kPa: solid  
Form: pellets  
Colour: natural colour (whitish)

Odour: weak, characteristic

Odour threshold: No data available

pH: Not applicable

Melting point/freezing point:	> 100 °C (DIN EN ISO 306)
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	Not applicable
Evaporation rate:	No data available
Flammability:	Not highly flammable.
Explosion limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Density:	at 20 °C: approx. 1.04 g/cm <sup>3</sup> (DIN 53479)
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	not self-igniting
Thermal decomposition:	approx. 300 °C To avoid thermal decomposition, do not overheat.

### Additional information

Viscosity:	No data available
Explosive properties:	In case of dust formation (Fine dust): May form explosible dust-air mixture if dispersed.
Oxidizing characteristics:	not oxidising
Bulk density:	at 20 °C: approx. 600 kg/m <sup>3</sup> (DIN 53466)

## 10. Stability and reactivity

Reactivity:	No data available
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	In case of dust formation (Fine dust): May form explosible dust-air mixture if dispersed.
Conditions to avoid:	Protect from excessive heat. Keep away from sources of ignition and heat. Avoid dust formation.
Incompatible materials:	Strong oxidizing agents
Hazardous decomposition products:	When greatly overheated, material may release hazardous decomposition products: monomers, hydrocarbons, gases/vapours, cyclic low molecular weight oligomers, carbon monoxide and carbon dioxide.
Thermal decomposition:	approx. 300 °C To avoid thermal decomposition, do not overheat.

## 11. Toxicological information

### Information on toxicological effects

Toxicological effects:	Acute toxicity (oral): Lack of data. No evidence of acute toxicity. Acute toxicity (dermal): Lack of data. No evidence of acute toxicity. Acute toxicity (inhalative): Lack of data. No evidence of acute toxicity. Skin corrosion/irritation: Lack of data. Dust: Can cause skin, eye and respiratory tract irritation. Processing, thermal hazards: Vapours: Can cause skin, eye and respiratory tract irritation. Serious eye damage/irritation: Lack of data. Dust: Can cause skin, eye and respiratory tract irritation. Processing, thermal hazards: Vapours: Can cause skin, eye and respiratory tract irritation. Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met. The chemical structure of the polymer does not suggest a specific alert for such an effect. Skin sensitisation: Based on available data, the classification criteria are not met. The chemical structure of the polymer does not suggest a specific alert for such an effect. Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met. The chemical structure of the polymer does not suggest a specific alert for such an effect. Carcinogenicity: Based on available data, the classification criteria are not met. No indications of human carcinogenicity exist. Reproductive toxicity: Based on available data, the classification criteria are not met. The chemical structure of the polymer does not suggest a specific alert for such an effect. Effects on or via lactation: Lack of data. Specific target organ toxicity (single exposure): Lack of data. Dust: Can cause skin, eye and respiratory tract irritation. Processing, thermal hazards: Vapours: Can cause skin, eye and respiratory tract irritation. Specific target organ toxicity (repeated exposure): Lack of data. Chronic toxic effects are not expected. The product has not been tested. The statement is derived from products of similar structure or composition. Aspiration hazard: Lack of data.
Other information:	When handled appropriately, even after long years of experience with this product, no adverse health effects are known.

### Symptoms

Dust: Can cause skin, eye and respiratory tract irritation.  
The melted product can cause severe burns.  
Thermal treatment, Processing: Irritating to eyes, respiratory system and skin.  
In case of ingestion: Swallowing may cause gastrointestinal irritation and pain of guts.

## 12. Ecological information

### Toxicity

Aquatic toxicity:	no evidence of aquatic toxicity
Effects in sewage plants:	In sewage treatment plants it may be separated mechanically.

## Persistence and degradability

Further details: Biodegradation: Product is not readily biodegradable.  
The product is likely to persist in the environment.

## Mobility in soil

No data available

## Additional ecological information

General information: Do not allow to enter into ground-water, surface water or drains.

# 13. Disposal considerations

## Waste treatment methods

### Product

Recommendation: With due observance of the regulations laid down by the local authorities, this must be brought to a suitable incineration plant/waste disposal site.

### Package

Recommendation: Dispose of waste according to applicable legislation.  
Non-contaminated packages may be recycled.

# 14. Transport information

## UN number

ADR/RID, IMDG, IATA-DGR:  
not applicable

## Sea transport (IMDG)

Proper shipping name: Not restricted  
Marine pollutant: no

## Air transport (IATA)

Proper shipping name: Not restricted

## Further information

No dangerous good in sense of these transport regulations.

# 15. Regulatory information

## National regulations - Korea

Industrial Safety and Health Act  
not applicable

Chemicals Control Act  
not applicable

## National regulations - Japan

Fire Service Act: Designated flammable goods

**Further regulations, limitations and legal requirements**

No data available

**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

AS/NZS: Australian Standards/New Zealand Standards

CAS: Chemical Abstracts Service

CFR: Code of Federal Regulations

CLP: Classification, Labelling and Packaging

DMEL: Derived minimal effect level

DNEL: Derived no-effect level

EC: European Community

EN: European Standard

EQ: Excepted quantities

IATA: International Air Transport Association

IATA-DGR: International Air Transport Association – Dangerous Goods Regulations

IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk

IMDG Code: International Maritime Dangerous Goods Code

MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships

MFSU: Manufacture, formulation, supply and use

OEL: Occupational Exposure Limit Value

OSHA: Occupational Safety and Health Administration

PBT: Persistent, bioaccumulative and toxic

PNEC: Predicted no-effect concentration

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail

TLV: Threshold Limit Value

TRGS: Technical Rules for Hazardous Substances

vPvB: Very persistent and very bioaccumulative

WEL: Workplace Exposure Limit

Reason of change: General revision

Date of first version: 30/1/2013

**Department issuing data sheet**

Contact person: see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.