

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

### Product identifier

Trade name: Luran® SAN Granulate Natural  
This safety data sheet pertains to the following products:  
Luran® 2580  
Luran® 3380  
Luran® 33100  
Luran® 358N  
Luran® 368R  
Luran® 378P  
Luran® 388S

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

General use: Polymer  
Basic material for chemical industry processing

### 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.  
In case of dust formation (Fine dust): May form explosible dust-air mixture if dispersed.  
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. 9003-54-7 Styrene-acrylonitrile copolymer

Additional information: Preparation 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. If the symptoms persist, seek medical attention.  
Following skin contact: The melted product can cause severe burns.  
Do not remove the product from the skin without medical assistance.  
After contact with molten product, cool skin area rapidly with cold water. Consult physician.  
After eye contact: Immediately flush eyes 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: Never give an unconscious person anything through the mouth.  
Rinse mouth with water. Drink one or two glasses of water.  
In the event of discomfort seek medical treatment.

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

Dust: Can cause skin, eye and respiratory tract irritation.

### 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 (CO<sub>2</sub>).

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: Smoke, styrene, Methyl methacrylate, 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:

Cool endangered containers with water jetspray.

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.

Collect dry and place in appropriate containers for disposal. Subsequent cleaning. (Water)

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 open flames, hot surfaces and sources of ignition. Use grounding equipment. Use explosion-proof equipment and non-sparking tools/utensils.

In case of dust formation (Fine dust): 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.

Further details:

Special danger of slipping by leaking/spilling product.

## 8. Exposure controls/personal protection

### Control parameters

Additional information:

The product contains very low levels of residual monomers and process chemicals (styrene, ethylbenzene and acrylonitrile) 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.

Do not breathe 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.

Safety shower and eye wash station should be easily accessible to the work area.

## 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: granulate Colour: natural colors (off-white)
Odour:	weak characteristic
Odour threshold:	No data available
pH value:	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:	not applicable
Vapour density:	No data available
Density:	at 20 °C: approx. 1.05 - 1.20 g/cm <sup>3</sup> (DIN 53479)

Water solubility: insoluble  
 Partition coefficient: n-octanol/water: not applicable  
 Auto-ignition temperature: Not self-igniting  
 Thermal decomposition: approx. 320 °C

**Additional information**

Viscosity, dynamic: not relevant  
 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: Keep away from open flames, hot surfaces and sources of ignition.  
 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. 320 °C

## 11. Toxicological information

### Information on toxicological effects

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.  
Acute toxicity (oral): Lack of data.  
Acute toxicity (dermal): Lack of data.  
Acute toxicity (inhalative): Lack of data.  
Skin corrosion/irritation: Lack of data.  
Serious eye damage/irritation: Lack of data.  
Sensitisation to the respiratory tract: Lack of data.  
Skin sensitisation: Lack of data.  
Germ cell mutagenicity/Genotoxicity: Lack of data.  
Carcinogenicity: Lack of data.  
Reproductive toxicity: Lack of data.  
Effects on or via lactation: Lack of data.  
Specific target organ toxicity (single exposure): Lack of data.  
Dusts: Irritating to eyes, respiratory system and skin.  
Specific target organ toxicity (repeated exposure): Lack of data.  
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

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

Effects in sewage plants: In sewage treatment plants it may be separated mechanically.

Further details: No data available

### Persistence and degradability

Further details: Biodegradation: Product is not readily biodegradable.

### Mobility in soil

No data available

### Additional ecological information

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



**SAFETY DATA SHEET**  
 according to Singapore Standard SS 586 - Part 3 - 2008  
**Luran® SAN Granulate Natural**  
 Material number LUR003

Revision date: 21/8/2017  
 Version: 19  
 Language: en-SG  
 Date of print: 28/8/2019

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**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.

**Contaminated packaging**

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

**Further regulations, limitations and legal requirements**

No data available

**16. Other information**

Uses advised against: For toys and childcare articles  
 Reason of change: Changes in section 8: Glove material  
 Changes in section 9: flash point, ignition temperature  
 Changes in section 10: Decomposition products  
 Date of first version: 4/3/2013

**Department issuing data sheet**

Contact person: see section 1: Department responsible for information



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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.