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

Product identifier

Trade name: Terlux®

This safety data sheet pertains to the following products:
Terlux® 2802
Terlux® 2802 Q161
Terlux® 2802 Q434
Terlux® 2802 Q434 TR37158
Terlux® 2802 SPL
Terlux® 2812
Terlux® 2812 Q434
Terlux® 2812 TL37080
Terlux® 2812 TR77742
Terlux® HD 2802
Terlux® HD 2812
Terlux® HD 2822

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

Floors may become slippery.
The melted product can cause severe burns.
Swallowing may cause gastrointestinal irritation and pain of guts.
In case of dust formation (Fine dust): May form explosible dust-air mixture if dispersed.

3. Composition / information on ingredients

Mixtures

Chemical characterisation: Polymer
CAS No. 9010-94-0 Butadiene-Methyl methacrylate-styrene-acrylonitrile copolymer
2-Propenoic acid, 2-methyl-, methyl ester, polymer with 1,3-butadiene, ethenylbenzene and 2-propenenitrile

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

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: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Consult an eye specialist in the event of irritation.

After swallowing: Rinse mouth and drink large quantities of water. Never give an unconscious person anything through the mouth.
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 (CO2).

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 (CO2).
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

Exposure controls

Make sure that the processing machines are well equipped with suction and ventilation systems. 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 Wear protective 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 Colour: transparent, varying colours
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:	No data available
Vapour density:	No data available

Density:	at 20 °C: approx. 1.08 g/cm³ (DIN 53479)
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	Not self-igniting
Thermal decomposition:	> 300 °C

Additional information

Viscosity	-
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: 600 kg/m³ (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: > 300 °C

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.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Lack of data.
Dusts: Can cause skin, eye and respiratory tract irritation.

Serious eye damage/irritation: Lack of data.
Dusts: Can cause skin, eye and respiratory tract irritation.

Sensitisation to the respiratory tract: Lack of data.
The chemical structure of the polymer does not suggest a specific alert for such an effect.

Skin sensitisation: Lack of data.
The chemical structure of the polymer does not suggest a specific alert for such an effect.

Germ cell mutagenicity/Genotoxicity: Lack of data.
The chemical structure of the polymer does not suggest a specific alert for such an effect.

Carcinogenicity: Lack of data.
No indications of human carcinogenicity exist.

Reproductive toxicity: Lack of data.
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.
Dusts: Irritating to eyes, respiratory system and skin.

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 appropiately, 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.

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: The insoluble part can be precipitated mechanically in suitable sewage treatment plants.

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.

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

Reason of change: Changes in section 8: Glove material
Changes in section 10: Decomposition products
Changes in section 9: flash point, ignition temperature
Changes in section 2, 5, 7, 10: General revision

Date of first version: 21/12/2012

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.