according to Regulation (EC) No 1907/2006

Thermoliner Stretch SL

Revised on: 25.07.2022 Page 1 of 5

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

1.1. Product identifier Thermoliner Stretch SL

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

Use of the substance/mixture

Sew er rehabilitation liner

Uses advised against

The product is intended for professional users.

1.3. Details of the supplier providing the safety data sheet

Company name: I.S.T. Innovative Sewer Technologies GmbH

 Street:
 Rombacher Hut 19

 Place:
 D-44795 Bochum

 Phone:
 +49 (234) 57988 - 0

 Fax:
 +49 (234) 57988 - 27

 E-mail:
 info@ist-w eb.com

Contact person: M.Peppel

Internet: https://www.ist-web.com
Informing department: Technology Department

Emergency number: GBK Gefahrgut Buero GmbH, Tel. +49 (0) 6132 - 84463

SECTION 2: Potential hazards

Regulation (EC) No 1272/2008

According to current knowledge, there are no known hazards to humans or the environment from this product when used as intended.

Eye contact:

No eye irritations known. Risk of mechanical damage during processing.

Skin contact:

Traces of lubricant on the fibre surface of PET fibres may cause degreasing of the skin. Wash them with soap and water. Barrier creams should be used. If skin irritation occurs, a doctor should be consulted.

Inhalation:

Not relevant.

Ingestion:

Harmless if sw allow ed in small quantities.

Other hazards

The substances in the mixture do not fulfil the PBT/vPvB criteria according to REACH, Annex XIII.

according to Regulation (EC) No 1907/2006

Thermoliner Stretch SL

Revised on: 25.07.2022 Page 2 of 5

SECTION 3: Composition/Information on ingredients

Chemical characterisation of the base polymer

Polyester produced from terephthalic acid (PTA) or dimethyl terephthalate (DMT) and ethylene glycol. [CAS No. 25038-59-9]. Catalysts in an amount < 0.1%

Physical characterisation of the base polymer

Monofilaments in various titres (dtex) and diameters. Raw white or spun dyed.

Lubricant

The product is lubricated to improve machinability. Typical contents 0.02 % to 0.6 % of fibre weight, depending on type and titre. Composition of the lubricant: lubricants, emulsifiers, anti-electrostatic agents.

Hazardous ingredients

No substances listed in the SVHC candidate list are contained in the article in a concentration of more than 0.1%.

Further information

There is no information available.

SECTION 4: First aid measures

Inhalation:

Not specifically affected.

Skin contact:

Not specifically affected. Traces of lubricant can be rinsed off with water. In case of fire, melted product may cause burns to the skin. Treat with plenty of water, do not remove clothing (risk of sticking to skin). Call a doctor.

Eye contact:

Not specifically affected.

Ingestion:

Not specifically affected.

SECTION 5: Fire-fighting measures

Suitable extinguishing media:

All common extinguishing agents.

Not to be used:

No restrictions. Adapt fire-fighting measures to the surroundings.

Hazardous fire gases:

Thermal decomposition and/or incomplete combustion produces flue gases with toxic components: Visible, soot-like fission products, water vapour, carbon dioxide, carbon monoxide and nitrogen-containing compounds, including nitrogen oxides and - in the trace range - hydrogen cyanide and, under certain circumstances, isocyanate vapours. Carbon monoxide (CO) and low-molecular compounds such as acetaldehyde etc., the inhalation of which must be avoided.

Protective equipment:

When fighting fires in closed rooms: Use self-contained breathing apparatus.

ERI Card:

No. 4-03 (CEFIC Emergency Action Cards).

according to Regulation (EC) No 1907/2006

Thermoliner Stretch SL

Revised on: 25.07.2022 Page 3 of 5

SECTION 6: Accidental release measures

Environmental protection:

No environmentally harmful effect known.

After spillage:

Absorb spillage with appropriate means (risk of slipping and tripping). Consider reuse.

Disposal:

see section 13

SECTION 7: Handling and storage

Handling:

According to industry practice for health and safety.

Fire protection:

Observance of the general rules of fire protection is recommended. Remove any volatile products of the lubricant during thermal treatment by suction and ventilation. Note the effect of possible electrostatic charging.

Storage:

No special safety requirements for storage rooms. The material is stable under normal storage conditions. Observe technical notes regarding optimal processing

Nature of the packaging:

Cardboard box with spacers and intermediate shelves made of cardboard, plastic stretch film.

SECTION 8: Exposure controls/personal protective equipment

Handling:

Sew er rehabilitation liners are safe to handle, provided that the usual standards of the processing industry regarding personal protection are observed.

Respiratory protection:

Avoid inhalation of any vapours.

Hand protection + skin protection:

The lubricant used may cause temporary skin irritation if left on for a long time. Protect hands with suitable gloves.

Eye protection:

Avoid eye contact by taking appropriate protective measures.

Body protection:

Usual standards of the textile and polymer industry are to be complied with.

Occupational hygiene limits:

none

according to Regulation (EC) No 1907/2006

Thermoliner Stretch SL

Revised on: 25.07.2022 Page 4 of 5

SECTION 9: Physical and chemical properties

Appearance: Form: Monofilament yarns, wound on yarn carriers

Colour: raw white or spun dyed

Odour: Faint, characteristic

Melting range: [°C] 250 - 260

Flash point: [°C] 350 - 400 closed crucible

Ignition temperature:[°C]approx. 420Thermal decomposition of the polymer:[°C]from approx. 300.

From approx. 150°C the lubricant can evaporate

Yarns and fibres are not explosive

Relative density of the polymer: [g/cm3] 1.38 – 1.42

Vapour pressure: not applicable

Solubility in water: Fibres and coating are insoluble in water.

VOC content: < 1 %

SECTION 10: Stability and reactivity

Chemical stability:

Explosion limits:

Stable under normal conditions

Conditions to avoid:

under normal storage conditions, none.

Substances to avoid:

under normal storage conditions, none.

Hazardous decomposition products:

under normal storage conditions, none.

Fire gases:

See section 5

SECTION 11: Toxicological information

Chemical stability:

The product is not described as toxic in any literature. The lubricants used in the production of felt or fleece may cause skin irritation in case of long-term contact. We are not aware of any adverse health effects when used as intended. The product is not sterile

SECTION 12: Environmental information

Ecological information:

The yarn is ecologically harmless, provided that the waste is disposed of in an orderly manner in accordance with the applicable legal regulations. The product is not ecotoxic according to its chemical nature and is hardly biodegradable.

SECTION 13: Disposal instructions

Notes on disposal:

The product can be incinerated or landfilled in suitable incineration plants in compliance with local legal requirements. Material or thermal recycling is recommended for the product and packaging.

according to Regulation (EC) No 1907/2006

Thermoliner Stretch SL

Revised on: 25.07.2022 Page 5 of 5

SECTION 14: Transport information

Regulations: Class UN No. Per.

RID/ADR: no dangerous goods ICAO/IATA DGR: No dangerous goods

Gases/IMDG Code: none

SECTION 15: Legislation

Legislation:

The product complies with the following EU directives:

Directive 2011/65/EC (08.06.2011) RoHS2 and

RL 2012/19/EC (04.07.2012) WEEE2

It contains no mercury, cadmium, lead and chromium(VI), no brominated flame retardants, no PCB. PCT. CFC. HCFC. HTC. no asbestos and no artificial radioactive substances.

SECTION 16: Other information

Changes

This safety data sheet is based on EU Regulation 1907/2006 of 18.12.2006, Annex II, although monofilament yarns are articles and are not classified as dangerous. According to Article 31 of EU Regulation 1907/2006 or according to ECHA "Guidance for Articles" (2008) there is no obligation for a SDS for the above products. The present SDS is intended to provide the essential physical, safety, toxicological and ecological data when handling man-made fibres for the known textile and technical applications. It is intended to provide appropriate information to professional users of man-made fibres. It is not intended for the private end user.

Further information

The information provided in this safety data sheet is correct to the best of our knowledge at the time of printing. The information is intended to provide guidance on the safe handling of the product specified in this safety data sheet during storage, processing, transport and disposal. The information is not transferable to other products. Insofar as the product is mixed, blended or processed with other materials or is subjected to treatment, the information in this safety data sheet cannot be transferred to the new material thus produced, unless expressly stated otherwise.