

Recron® Polyester Texturised Yarn

Polyester
Sector

1. IDENTIFICATION OF SUBSTANCE/ PREPARATION AND COMPANY/ UNDERTAKING

1.1 Identification of the product:

Product name: Recron® Polyester Texturised Yarn

Product types: Recron®-Semidull, Recron®-Bright, Recron®-Superbright®, Recron® - Cotluk®,
Recron®-FeelFresh, Recron®-FR

1.2 Use of the product: Production of textile products.

1.3 Company/ Undertaking identification

1.3.1 Manufacturer: Reliance Industries Ltd.
(Polyester Sector)
Reliance Corporate Park, Building No. 8, 'B' Wing, First Floor,
Opposite Ghansoli Railway Station, Thane Belapur Road,
Navi Mumbai - 400 701, INDIA
Tel: +91-22-44781264
Fax: +91-22-44779107

E-mail address of person responsible for the Safety Data Sheet:

girish.c.desai@ril.com

1.3.2 Emergency telephone: +91-261-2835050 OR +91-261-2835056
(24 x 7) Site Shift Manager, Hazira Division

1.4 REACH Only Representative Attn: Mr James Searles
Step toe & Johnson LLP
240 Avenue Louise, 1050 Brussels, Belgium
Tel: +3226260500, Fax: +3226260510
Email: jsearles@step toe.com

2. HAZARDS IDENTIFICATION

Hazard Codes: Not applicable

Risk phrases: Not applicable

Safety phrases: Not applicable

This product is not considered hazardous or toxic. The hazards if any, are associated with its processing. Polymer dust and spinnings fumes may represent a fire hazard at sufficient concentrations in presence of ignition sources.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Composition:

Chemical identity	CAS No	EINECS/ ELINCS No	Concentration
Polymer (Polyethylene terephthalate)	25038-59-9	Not listed	> 92%
Additives (Titanium dioxide, colourants, etc.)	-	-	< 4%
Spinnings and coning oil	-	-	< 4%
Hazardous ingredient			None

3.2 Classification according to 1999/45/EC: Not applicable (not a dangerous preparation)

3.3 Remarks on special components:

The products and their constituents are not dangerous. The products do contain oil that serves as a processing aid and may generally be removed in an aqueous medium, if so required.

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4. FIRST AID MEASURES

- 4.1 Inhalation:** Inhalation of fibre dust and finish decomposition products should be avoided by hood suction and fresh air ventilation. In case of coughing or other symptoms the person should seek fresh air and if necessary, see a physician.
- 4.2 Skin contact:** Wash with soap and water. If irritation develops, consult a physician.
- 4.3 Eye contact:** The eyes should be washed immediately with plenty of water. If irritation continues, consult a physician.
- 4.4 Ingestion:** Do not induce vomiting. Call in a physician and show him this data sheet.

5. FIRE-FIGHTING MEASURES

- 5.1 Burning behaviour:**
- | | |
|----------------------------|--|
| Flammable class: | Not determined |
| Flash point: | Not applicable. Product burns in fire. |
| Self-ignition temperature: | Data not available |
| Decomposition temperature: | > 300°C |
- 5.2 Suitable extinguishing media:** Dry Chemical Powder, CO₂ or Water Spray (see 5.3 below)
- 5.3 Extinguishing media which must not be used for safety reasons:** Do not use water, if fire is caused by an electrical short circuit.
- 5.4 Special exposure hazards in a fire:** Low fire hazard. Polymer dust & fumes may represent a fire hazard at sufficient concentrations. On complete combustion, the major products formed are carbon dioxide and water. Remove ignition sources. Beware of electrostatic charges.
- 5.5 Special protective equipment for fire-fighters:** Wear self-contained breathing apparatus, protective clothing and headgear to prevent contact with skin & eyes.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions:** Use normal personal protection.
- Environmental precautions:** In case of accidental spills, do not allow entering drains and waterways. When picked up, treat material as prescribed under section 13 (Disposal considerations).
- Methods for cleaning up:** Clean up by vacuuming, physical picking or mechanical means.
- If cleaning up involves the use of water, the wastewater should be given the appropriate treatment in an effluent treatment plant, in line with local regulations.



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7. HANDLING AND STORAGE

- 7.1 Handling:** Normal handling and processing does not require special technical protective measures. Avoid formation of dust.
- Accumulation of fibre dust may represent at sufficient concentrations a fire and explosion hazard. Remove ignition sources. Beware of electrostatic charges.
- If subsequent processing involves the use of water, the wastewater should be given the appropriate treatment in an effluent treatment plant, in line with local regulations.
- 7.2 Storage:** Store at ambient temperatures.
- Bobbins/ beams/ cartons must be stored in line with existing provisions. Existing fire protection measures have to be followed.
- Do not store near flame, ignition sources, direct sunlight or incompatible materials. Maintain good housekeeping to control dust accumulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Exposure limit values:** Comply with national occupational threshold values for dust. According to TRGS 900 (Germany) there are two values:
- a) 3 mg/m³ for fine dust
 - b) 10 mg/m³ for coarse dust
- 8.2 Exposure controls:** Avoid accumulation of and contact with polymer dust and finish decomposition products by hood suction, sufficient fresh air supply and proper house keeping.
- 8.2.1 Occupational exposure controls:**
- | | | |
|----------------------------|---|---|
| a) Respiratory protection: | | No special measures required, except for fire or insufficient hood suction / fresh air supply (see 4 and 5). |
| b) Hand protection: |  | Protective gloves are required while cutting carton straps or filament waste. |
| c) Eye protection: |  | Wear safety glasses (e.g. especially while cutting bale or carton straps). |
| d) Skin protection: | | No special measures required. Yarns that are processed at high speeds may cause abrasions or cuts. Appropriate protective measures are recommended. |
- 8.2.2 Environmental exposure controls:** Exhausted polymer dust and finish decomposition products shall be kept back efficiently by adequate filter systems.

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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Appearance	Form: Bobbin, Beam
Colour	Raw-white, white or dyed
Odour	Odourless

9.2 Important health, safety and environmental information

pH	Not applicable
Melting point/range	240 - 260°C
Flash point	Data not available
Flammability	Data not available
Explosive properties	Data not available
Oxidising properties	None
Vapour pressure	Not applicable
Relative density	1.3 – 1.4 g/cm ³
Solubility	Insoluble in common solvents.
Water solubility	Insoluble
Partition coefficient:	Not applicable
Viscosity	Not applicable
Vapour density	Not applicable
Evaporation rate	Not applicable

10. STABILITY AND REACTIVITY

10.1 Conditions to avoid:	Material is stable under normal conditions. Temperatures above 300°C lead to thermal decomposition (see also 10.3)
10.2 Materials to avoid:	Strong oxidation agents as well as strong acids and caustic will decompose polyester. Acetic anhydride, acetone, aniline, benzene, chloroform, chromic acid, cyclohexanone, dimethylformamide, dioxane, ethyl acetate, methyl ethyl ketone, methylene chloride, phenol, tetrahydrofuran, trichloroethylene, triethanolamine, caustic soda.
10.3 Hazardous decomposition products:	Above the decomposition temperature, the major volatiles will be terephthalic acid, oligomers of PET, carbon dioxide, carbon monoxide, acetaldehyde, oxides of Phosphorus and low molecular weight alcohols/ aldehydes. If heated to 150-250°C during processing, the filament lubricants can degrade and generate off gases, which may contains small amounts of chemicals such as aldehydes, alcohols, acetic acid, acetone, etc. We are not aware of chemicals such as these reaching concentrations that present a serious health hazards. However, information on toxic effects and recommended exposure limits of these and other chemicals can be found in the most recent edition of the ACGIH documentation of threshold limit values. When Polyester Filament Yarn is burned, no unusual combustion gases have been observed, and its combustion products are similar to those of other organic materials composed of the same elements.

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11. TOXICOLOGICAL INFORMATION

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|-------------|------------------------|--|
| 11.1 | Acute toxicity | Low oral toxicity |
| 11.2 | Inhalation | Low acute toxicity. Dusts and vapours or fumes evolved during thermal processing may cause irritation to the respiratory system. |
| 11.3 | Ingestion | Data not available |
| 11.4 | Skin irritation | No evidence of irritant effect from normal handling and use. |
| 11.5 | Eye irritation | Dust and fumes generated during processing may have irritant effect on eyes. Permanent damage is unlikely. |

Recron® Polyester Filament Yarn is a non-toxic man-made fibre. Proper use has not been associated with any special hazard or any detrimental effects on health. It meets the requirements of Oeko-Tex standard 100 (Class-1), indicating the absence of harmful substances.

12. ECOLOGICAL INFORMATION

- | | | |
|-------------|---------------------------------------|---|
| 12.1 | Eco-toxicity: | Low toxic to aquatic organisms. The yarn product can be separated out mechanically. Some finish components may vaporize or decompose at temperatures above 130°C.

If subsequent processing involves the use of water, the wastewater should be given the appropriate treatment in a purifying plant, in line with local regulations. |
| 12.2 | Mobility: | The product is insoluble in water. Due to their negligible solubility in water and high molecular weight, they are expected to have a low BOD and will not cause oxygen depletion in aquatic systems. |
| 12.3 | Persistence and degradability: | The product is non-biodegradable in soil. |
| 12.4 | Bio accumulative potential: | They are expected to be non-biodegradable and unlikely to bio-concentrate. |
| 12.5 | Other adverse effects: | Unlikely to affect biological treatment processes. |

13. DISPOSAL CONSIDERATIONS

Disposal of Polyester product does not pose any specific danger.

It is recommended that Polyester Filament yarns & waste be recycled.

If recycling is not possible, Polyester waste yarns & waste can be disposed of in a suitable refuse installation or incinerated subject to local regulations.

14. TRANSPORT INFORMATION

- | | | |
|-------------|---|---|
| 14.1 | UN number: | Not applicable |
| 14.2 | Class/ Packing group: | Not restricted |
| 14.3 | Marine pollutant: | None |
| 14.4 | International Transport Regulations: | Not classified as dangerous for transport |
| 14.5 | Road / Rail (ADR / RID): | Not restricted |
| 14.6 | Sea (IMDG): | Not restricted |
| 14.7 | Air (ICAO / IATA): | Not restricted |

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15. REGULATORY INFORMATION

Recron® Polyester products do not require hazard warning labels in accordance with EC directives.

Risk phrase(s): Not applicable

Safety phrase(s): Not applicable

16. OTHER INFORMATION

16.1 Recommended restrictions on use:

This safety data sheet is provided for the products and their applications as specified in Section 1. The safety data sheet is not written with the individual end-user in mind.

It is recommended that supplementary information be requested if an unusual application of these products is intended.

Consult the manufacturer if the product(s) is to be used for special applications (such as, but not limited to, the food, hygienic, medical or surgical sectors) or for new end-uses.

16.2 Further information:

Recron® Polyester Textured Yarn is an article made of man made fibres and is not subject to **European Regulation (EC) 1907/2006** on registration, evaluation and authorization of chemical substances (**REACH**). Safety Data Sheets or Chemical Safety Reports according to *Art. 31* of this regulation are therefore not required.

This data sheet was established following *Annex II* of this regulation. The raw materials and auxiliaries used for the manufacturing of **Recron® Polyester Texturised Yarn** are predominantly concerned by this regulation. Reliance will track the status of the registration and evaluation of these materials.

16.3 Disclaimer:

This Safety Data Sheet and the health, safety and environmental information it contains are intended to provide a summary of our knowledge and guidance regarding use of the designated Product. Its contents are offered in good faith as accurate and complete as of the date specified below, but without guarantee. The data herein applies only to the Product sold by entities of the Reliance group and not to products sold by others. It relates only to the Product and does not relate to its use in combination with any other product or material or in any process.

Local laws and regulations and conditions of use and suitability of the product for particular uses are beyond the control of Reliance; all risks of use, storage, handling, transportation and disposal of the Product are therefore assumed by the user and Reliance expressly disclaims all warranties of every kind and nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or suitability of the Product. Reliance shall not be responsible for any damage or injury resulting from abnormal use of the Product, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the Product.

Appropriate warnings and safe handling procedures should be provided to all handlers and users. In the case of a user in the European Union, as per Article 34 of REACH Regulation (EC) No. 1907/2006, user shall communicate to Reliance any new information on hazardous properties of the Product and/or new information relevant to risk management measures for the identified uses.

Alteration or re-publication of this document in whole or part is strictly prohibited.

16.4 Revisions:

Version: 1.1 - Contact details of "REACH" Only Representative included as *section 1.4*. Manufacturer office address changed.

Version: 1.2 – Product types included in section 1.1

Version: 1.3 – Re-affirmed.

Version: 1.4 – Re-affirmed.