

Commercial name: **Polyester (PET) Precision cut flock**

1. Identification of substance/preparation and company/undertaking

Product name/cut Polyester (PET) Precision Cut Flock dtex 0.9 – 22, lengths 0.3 - 5 mm, raw white or dyed

Company name (Producer and Supplier) Head office and production:
SwissFlock AG, Gerliswilstr. 25, CH - 6021 Emmenbrücke
Tel.: + 41 41 268 63 63 Fax.: +41 41 268 63 73
Web: www.swissflock.com, E-mail: info@swissflock.com

2. Hazards identification

To the best of our knowledge, Polyester flock products have not been associated with negative effects on humans if used in accordance with good industrial hygiene practice and any legal requirements.

Fine dust fibres:

With the above mentioned dimensions, all Cut Flock Products of SwissFlock AG are above the dimensions of "Fine Dust Fibres" which have been defined as follows *): Diameter < 3 µm, length 5 - 100 µm, proportion length: diameter > 3:1. *) Deutsche Forschungsgemeinschaft DFG: List of MAK and BAT Values 2011. Verlag VCH Weinheim 2011, p. 161 f.

3. Composition / information on ingredients

Chemical nature: Polyester (PET), Poly (ethylene terephthalate)
CAS Nr. 25038-59-9

Physical nature:

Cut polyester fibres with diameters of 9 µm (0.9 dtex) to 45 µm (22 dtex) and mean length of 0.3 to 5.0 mm. Raw white, spundyed or bathdyed.

Preparation on the fibre:

Inorganic and organic chemicals (total amount max. 2.0 % of weight) which are indispensable for Flock quality intended for electrostatic flocking.

Flock black spundyed:

Contains about 1.1 – 3% of black pigment = Carbon Black (CI 77266).

4. First-aid measures

Inhalation Not specifically concerned (s. point 2)

Skin contact Not specifically concerned

*In case of fire, the molten product may cause burns. Rinse with plenty of water. Do **not** attempt to remove clothes (danger of adherence to the skin). Call for a physician.*

Eye contact Not specifically concerned

Ingestion Not specifically concerned

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5. Fire-fighting measures

Fire extinguishing agents All usual extinguishing media may be used
Restrictions No restrictions

Specific information for fire-fight:

Use autonomous respirators to fight fire indoor or in poorly ventilated areas. Do not use water as extinguishing agent in the presence of uninterrupted electrical installations.

Hazardous decomposition products:

Depending on temperature and oxygen availability, combustion off-gases contain variable quantities of toxic substances (carbon monoxide, hydrogen cyanide, various organic compounds) which must not be inhaled.

6. Accidental release measures

Accidental dispersion/spill:

Collect material for controlled re-use or waste disposal. No special safety risks or risks to the environment.

7. Handling and storage

Fire precautions:

Remove dust, fly and finish residues by ventilation and vacuum cleaning, specially on heat setting operations. Keep away from ignition sources. Beware of static electricity and discharges (s. point 9).

Storage:

No special safety precautions.

Storage conditions:

Consider technical advices referring to optimal processability.

8. Exposure controls and personal protection

Components with occupational exposure limits:

None

Industrial hygiene:

No special risks if handled in accordance with good industrial hygiene practice and any legal requirements.

Personal protection:

Dust mask, protecting goggles recommended.

9. Physical and chemical properties

Appearance

State:

solid

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	Form:	short fibres
	Colour:	raw white, or dyed
	Odour:	none
Characteristic temperatures:	Melting range:	250-260°C
	Flash point:	about 400°C
	Ignition temperature:	about 450°C
	Thermal decomposition:	starts at about 350°C
Physical values:	Density:	1.36 - 1,38 g/cm ³
	Apparent density:	50 – 200 kg/m ³
	Vapor pression:	not applicable
	Solubility in water:	not water soluble

Explosion limits:

Cut Flock / air mixtures may be explosible within certain concentration limits and sufficiently high ignition energies. Dust explosion class 1, lower range. Normal flock has a minimum ignition energy of about 150 mJ ²⁾. On DC electrostatic flocking installations, flock samples can only be ignited at discharge energy > 1300 mJ. Such discharges can only be achieved on a breakdown of the electrostatic flocking installations. On AC electrostatic flocking installations, ignitions of flock are more easy. Effects of solvents from adhesives in the air have to be considered carefully ²⁾. For save operation of electrostatic flocking installations, check EN 50223 ³⁾ and NFPA 33 (USA) ⁴⁾.

- 1) Oßwald, Reiner: Brand und Explosionsschutz in der Flockindustrie. Flock 99, 15. Internat. Flockseminar 1999; 10-1 bis 10-15.
- 2) Pidoll, Ulrich von: Vermeiden der Entzündung faserförmiger Beschichtungsstoffe (Flock) beim elektrostatischen Beschichtungsprozess. PTB-ThEx-9,5 + 29 Seiten A4. Braunschweig Nov.1999. ISBN 3-89701-441-6
- 3) Europäischer Norm DIN EN 50223 (2001): Ortsfeste elektrostatische Flockanlagen für entzündbaren Flock.
- 4) NFPA 33 (2000): Standard for spray application using flammable or combustible materials.

10. Stability and reactivity

Conditions to avoid:

None under normal storage conditions.

Materials to avoid:

None under normal storage conditions.

Hazardous decomposition products:

None under normal storage conditions.

Combustion off-gases see point 5.

11. Toxicological information

The fibre product does not present special risks on humans if used in accordance with good industrial hygiene practice and the concerning legal requirements. In case of special end uses, SwissFlock AG may be contacted for additional information.

12. Ecological information

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The fibre product is not associated with ecological problems, provided that the wastes are orderly disposed of. Because of its chemical nature, the product is not ecotoxic and not readily biodegradable.

13. Disposal considerations

Can be disposed of as solid waste or burned in suitable installations, subject to local regulations.

14. Transport information

International reglementation

Class RID/ADR	not classified as hazardous
Class ICAO/IATA-DGR	not classified as hazardous
Class GGVSee/IMDG-Code	not classified as hazardous

15. Regulatory information

Classification and labelling: Not classified as hazardous (reglementation EEC and others).

16. Other information

This Safety Data Sheet uses the format and listing sequence of Commission Directive (EU) no. 453/2010 though the described product is not a dangerous preparation.

It is intended to inform about physical properties, safety aspects, toxicological data and ecological characteristics that are relevant for the use of synthetic fibres in textile, technical and industrial applications, and to recommend procedures for their handling, storage and transport.

This Safety Data Sheet is a complement to Technical Data Sheets but does not replace them. The information given is to the best of our knowledge at the date of issue. It does not constitute a contractual description of product properties.

The Safety Data Sheet is not ment to be handed out to private end-users.

The Safety Data Sheet does not disengage the user of his duty to know and to apply any law and reglementation that may be relevant.

Additional information may be requested at SwissFlock AG if special applications of synthetic fibres are intended.