

Colorfabb nGen_FLEX filament



1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

- 1.1 Identification of the substance or preparation:** ColorFabb nGen_FLEX filament; all available colors.
- 1.2 Use of the substance or preparation:** FDM 3D printing
- 1.3 Company/undertaking identification** Colorfabb B.V.
NL-5951 DK BELFELD, The Netherlands
Tel.: +31 77 4664015
Fax: +31 77 3971414
E-mail: sales@colorfabb.com
- 1.4 Emergency telephone:** For emergency, health, safety, and environmental information
Colorfabb B.V.; Tel.: 0031-77 4664015 (only during office hours)

2. HAZARDS IDENTIFICATION

- 2.1 Classification** This product is not classified as hazardous according to EC 1272/2008
- 2.2 Label elements**
- | | |
|-------------------------|-----------------|
| Health hazards: | Not applicable |
| Environmental hazards | Not applicable. |
| Hazard symbol | Not applicable |
| Signal Word | Not applicable |
| Hazard Statement | Not applicable |
| Precautionary statement | Not applicable |
| PBT and vPvB substances | Not applicable |
- 2.3 Other hazards** None known

3. COMPOSITION AND INFORMATION ON INGREDIENTS

3.1 Description

3.2 Hazardous ingredients

Substance name	CAS number	Concentration	Classification
Copolyester	---	>96 %	Substance is not classified according to Directive 1272/2008 (CLP)
Color additives	---	<4 %	Substances are not classified according to Directive 1272/2008 (CLP)

3.3 Additional information

 No additional information

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4. FIRST AID MEASURES

4.1 Description of first aid measures

General Advice	First aid measures are not expected if printing filament is used as recommended. No hazards known that require special first aid measures.
Inhalation	Not likely due to physical form. Overheating or burning may release vapors or decomposition products which may be irritating. In case of inhalation of decomposition products, move to fresh air. Get medical attention if symptoms persist.
Eye contact	Unlikely to occur. Particles or dust may give mechanical irritation to the eyes. Rinse eyes with plenty of water. Get medical attention if symptoms occur.
Skin contact	Unlikely to result in first aid measures. Molten material coming from the 3D printing device may cause burns. Cool molten material adhering to the skin with plenty of water and see a physician for removal of adhering material and treatment of burn.
Ingestion	Unlikely to occur. Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Burns should be treated as thermal burns. The material will come off as healing occurs.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards	Contact with molten substance/material may cause severe burns to skin and/or eyes
Treatment	Treat symptomatically

5. FIRE FIGHTING MEASURES

General Fire Hazards	Polymer material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures if needed.
5.1 Extinguishing media	
Suitable extinguishing media:	Water spray, dry-chemical, carbon dioxide
Unsuitable extinguishing media:	None known
5.2 Special hazards arising from the substance/mixture	Powdered material may form explosive dust-air mixtures
5.3 Advice for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions	Wear appropriate personal protective equipment if necessary.
6.2 Environmental precautions	Material not regarded as dangerous for the environment
6.3 Cleanup, containment and disposal of spill	Sweep up dust or particles or pieces of filament by scoop or vacuum. Dispose of material in suitable container according local regulations.
6.4 Reference to other sections	Not applicable.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling	Handle in accordance with good hygiene and safety practice. Avoid contact with molten material. Avoid overheating. Ensure adequate ventilation during printing.
7.2 Conditions for safe storage	Keep containers closed in a cool and dry place, away from direct sunlight. Avoid uptake of moisture, to protect the technical integrity of the product.
7.3 Specific use	Copolyester 3D filament is to be used in suitable FDM 3D printers only.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits	Printing filament contains no substances with occupational exposure control limits.
Biological limit values	There are no biological limit values for any of the components.
Recommended monitoring procedures	No monitoring procedures recommended
Derived No Effect Level (DNEL)	Not established

8.2 Exposure controls

Appropriate Engineering Controls	Ensure adequate room ventilation to prevent buildup of dust or fumes during printing. Keep processing temperatures below decomposition temperature
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Individual protection measures

Eye protection	Not required (for FDM 3D printing)
Hand protection	Not required (for FDM 3D printing)
Skin protection	Not required (for FDM 3D printing)
Respiratory protection	Not required (for FDM 3D printing)

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using/printing this material.

Environmental exposure controls

No data available.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Filament, string, spool
Physical state @20°C	Solid
Color	Various
Density	≈ 1,13 g/cm ³
Odor	Slight
pH	No data available
Boiling point	No data available
Flash point	Not applicable, combustible solid
Flammability	No data available
Vapor pressure	Not determined
Solubility (in water)	Negligible
Solubility (other)	No data available
Evaporation rate	Not determined
Autoignition temperature	No data available
Decomposition temperature	>300°. Thermal stability not tested. Low stability hazard expected at normal printing temperatures.
pH-value	No data available
Viscosity	No data available
Flashpoint	Not applicable, combustible solid

10. STABILITY AND REACTIVITY

10.1 Reactivity	None known
10.2 Chemical stability	Chemically stable under normal conditions of use and storage
10.3 Possibility of hazardous reactions	None known.
10.4 Conditions to avoid	Avoid conditions of overheating which may result in degradation.

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10.5 Incompatible materials Avoid strong oxidizing agents

10.6 Hazardous decomposition products Carbon monoxide, carbon dioxide

11. TOXICOLOGICAL INFORMATION

Skin contact No data available (not to be expected)

Eye contact No data available (not to be expected)

Skin sensitisation No data available (not to be expected)

Respiratory sensitisation No data available (not to be expected)

CMR effects No data available; none of the ingredients is listed as CMR substance

General remarks No other toxicological data available

12. ECOLOGICAL INFORMATION

12.1 Aquatic toxicity No data available

12.2 Persistence and degradability No data available

12.3 Bioaccumulative potential No data available

12.4 Mobility in soil No data available

12.5 Results of PBT and vPvB assessment No data available; product does not contain PBT or vPvB listed substances

12.6 Other adverse effects No adverse effects known to date

12.7 Additional ecotoxicological information Contains no substances known to be hazardous for the environment.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods Dispose of material waste and residues in accordance with local authority requirements.

13.2 Additional information None available

13.3 Packaging Cardboard box and/or empty filament spool can be recycled or can be disposed of in accordance with local regulations

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14. TRANSPORT INFORMATION

14.1 RID / ADR	Not regulated
14.2 ICAO / IATA-DGR	Not regulated
14.3 GGVSEE / IMDG-CODE	Not regulated
14.4 UN-NR	Not regulated

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the substance or mixture

US Toxic Substances Control Act (TSCA) All components of this product are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

15.2 Chemical safety assessment None

16. OTHER INFORMATION

Revision Information Not relevant

Relevant H-phrase: None

Changes compared to previous version:

Abbreviations

- REACH; Registration, Evaluation, Authorisation and restriction of chemical substances
- EC: European Community
- STOT: Specific Target Organ Toxicity
- PBT: Persistent, Bioaccumulating, Toxic
- vPvB: very Persistent, very Bioaccumulating
- ADR; Accord européen relative au transport international des marchandises Dangereuses per Route
- ADN: Accord européen relative au transport international des marchandises Dangereuses per voies de Navigation intérieures
- RID: Regulations for the international Transport of dangerous goods by rail
- IMDG: International maritime dangerous goods code
- ICAO: International civil aviation organization

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This safety datasheet complies with the requirements of EC 1907/2006 and regulation EC 2015/830. Label element according to regulation EC 1272/2008.

Disclaimer

The information provided in the safety datasheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information only relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.