1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

1.1 Identification of the substance or preparation: ColorFabb XT 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

<table>
<thead>
<tr>
<th>Substance name</th>
<th>CAS number</th>
<th>Concentration</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copolyester</td>
<td>---</td>
<td>&gt;96 %</td>
<td>Substance is not classified according to Directive 1272/2008 (CLP)</td>
</tr>
<tr>
<td>Color additives</td>
<td>---</td>
<td>&lt;4 %</td>
<td>Substances are not classified according to Directive 1272/2008 (CLP)</td>
</tr>
</tbody>
</table>

3.3 Additional information: No additional information

Safety datasheet conform regulation (EC) 2015/830

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Version: 1.0  Replaces version of:
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.
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
XT 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.
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 @20ºC**
Solid

**Color**
Various (clear, white, black, light gray, dark gray)

**Density**
≈ 1,27 g/cm³

**Odor**
Typical, very weak

**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**
>300º. 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.
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 sensitation | No data available (not to be expected) |
| Respiratory sensitation | 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 |
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.

Korean Toxic Substances Control Act (ECL)  All components are listed on the Korean inventory or are covered by a polymer exemption.

15.2 Chemical safety assessment  None

16. OTHER INFORMATIE

Revision Information  Not relevant

Relevant H-phrase:  None

Changes compared to previous version:  None

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
Dangerouses per Route
ADN: Accord européen relative au transport international des marchandises
Dangeresuses 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
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.