



Revision date :

Material Safety Data Sheet

Directive 1907/2006 CE

1. Identification of the substance- preparation and company

1.1 identification of the substance /preparation

Chemical denomination : PLA

Commercial name : Fusion

2. Use of substance / preparation

Additive printing filaments

3. Identification of the company

SA2P sas / Treedfilaments

Via Messina 101

20831 Seregno (MB) Italy

Ph. +39 0362320500

e-mail : info@treedfilaments.com

4. Emergency phone number

+39 0362320500

2. Composition / information on ingredients

1. The preparation is composed by : PLA , additive max 5% , colors max 2%

3. Hazards classification

1. **Classification :**

The preparation is not classified as dangerous according CEE 1999/45 and 67/548 directive updates .

2. **Potential health effects :**

The preparation is considered harmless for human health as it is and when exposed to normal and predictable production process and storage . According with EU directives it is not dangerous . See section 4 and 1.1. for further information .

3. **Potential environmental effects :**

The preparation is normal storage and processing conditions is inert and does not show environmental hazards .

4. **First aid measures**

1. **General information :**

At ambiente temperature the product is not irritating and does not release harmful smokes . The measures indicated are refereed to critical situation (fire , wrong process , conditions) . Immediately remove any contained clothing , shoe or stockings .

2. **Eye contact :**

Rinse cautiously with water for several minutes . remove contact lenses , if present and easy to do . Continue rising . Consult an eye specialist in the event of irritation .

3. **Skin contact :**

The melted product can use severe burns . do not attempt to remove molten product , or molten product that has cooled . from skin without medical assistance . After contact with molten product , cool skin area rapidly with cold water .
Consult physician .

4. **Inhalation :**

Provide fresh air . Put victim at rest and keep warm . Seek medical attention .

5. **Ingestion :**

Rinse mouth with water . Drink one or two glasses of water . Never give an unconscious person anything trough the mouth . Seek medical attention .

6. Specific instruments needed on workplace :

Gloves , eye protection .

5. Fire fighting measures :

1. Extinguishing media :

water fog , foam , extinguishing powder , carbon dioxide .

1.1 Extinguishing media with must NOT be used for safe reason :

high power water jet .

2. Hazardous combustion products :

in case of fire may be liberated : hydrogen cyanide , carbon monoxide , carbon dioxide (CO₂) , In case of dust : danger of dust explosion .

3. Fire fighting procedure :

Wear a self-contained breathing apparatus and chemical protective clothing .

Use caution in approaching fire . Do not allow fire water to penetrate into surface or ground water . Fire residuals and contained extinguishing water must be disposed of in accordance with the regulations of the local authorities .

6. Accidental release measures

1. Health and safety precaution :

Avoid walking on filaments to minimize slipping risk .Provide adequate ventilation . Wear personal protection equipment .

2. Measure for environmental protection :

Place waste in an appropriate labeled container for disposal . Do not allow to penetrate into soil , waterbodies or drains .

3. Measures for cleaning / collecting :

Avoid generation of dust , remove all sources of ignition .

Take up mechanically . Collect in closed containers for disposal .

7. Handling and storage

1. General handling :

Provide adequate ventilation , and local exhaust as needed . Do not breathe dust .
In the case of the formation of dust : withdraw by suction . Molten material : avoid contact with the substance . Take precautionary measures against static discharge . Keep away from sources of ignition . Use grounding equipment .
Use explosion proof equipment and non sparking tools . Avoid open flames .
Dust may form explosive mixture with air .

2. Storage conditions :

Store in a well ventilated place . Keep container tightly closed . Protect against heat - sun rays . Protect from moisture contamination . Storage class 11

8. Exposure controls - personal protection

1. OEL/PEL

Breathable powder : US TLV -8h TWA : 4 mg /m³
total powders : US TLV-TWA : 10 mg/m³

2. Personal protective equipment :

Hands : protective gloves according to EN 374 . Glove material
nitrile rubber glove

Layer thickness : 0,11 mm , breakthrough time > 480 min .

Observe glove manufacture's instructions concerning penetrability and breakthrough time .

In case of melting protective gloves against heat according to EN 166

Observe glove manufacturer's instructions concerning penetrability and breakthrough time .

Eye : tightly sealed goggles according to EN 166

Skin : wear suitable protective clothing . Boots or wear protective shoes .

Respiratory protection :

respiratory protection must be worn whenever the WEL levels have been exceeded . use filter type A-P2 according to EN 14387

9. Physical and chemical properties

- 1. Aspect : filament
- Color : natural and all the RAL colors
- Smell : weak , characteristic .
- Molecular formula : N/A
- Molecular weight : N/A

10. Stability and reactivity

- 1. Stability : stable under recommended storage conditions
- 2. Conditions to avoid : protect from excessive heat . Keep away from sources of ignition and heat . Avoid dust formation .
- 3. Incompatible materials : strong oxidizing agents .
- 4. Hazardous decomposition products : In case of fire may be liberated :
hydrogen cyanide , carbon monoxide and carbon dioxide (CO₂)
Thermal decomposition approx. : 300°C .
To avoid thermal decomposition , do not overheat .

11. Toxicological information

- ingestion : in this composition it can be harmful
- dermal : in this composition is little harmful
- inhalation : in this composition , if the product is burned , can cause irritation .

12. Ecological information

- 1. Environmental overview :
no evidence of aquatic toxicity
- 2. Bioaccumulation and toxicity :
Avoid product dispersion , the preparation is not biodegradable .
In sewage treatment plants it may be separate mechanically .
To avoid bioaccumulation plastics should not be disposed in the sea or in other water environments .

13. Disposal considerations

1. Disposal procedures :

observe all local and national regulations when disposing of this material

2. Recycle :

with due observance of the regulation laid by the local authorities ,
this must be brought to a suitable incineration plant -waste disposal site .

3. National and European regulations :

directive 91/156/CEE , directive 91/689/CEE, Directive 94/62/CEE.

14. Transport information

No limit existing .

15. Regulatory information

1. labelling

this preparation is not classified as dangerous with actual regulation
(1999/45/CEE) , (67/548/CEE) and updates . Labelling not required .

National regulations - USA

hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 1 (Slight)

Reactivity: 0 (Minimal)

HVMS Version III Rating

Health: 1 (Slight)

Flammability: 1 (Slight)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

| | |
|-----------------|---|
| HEALTH | 1 |
| FLAMMABILITY | 1 |
| PHYSICAL HAZARD | 0 |
| | X |

16. Every printed part , item or other component realized with this material under physical status of filament, is under direct responsibility of the individual , factory or other entity that realizes it .

17. Other information

This safety data sheet is provided according to directive 1907/2006/CE and 91/155/CE.



DISCLAIMER

The Information presented herein has been compiled from sources considered to be dependable and is accurate to the best of our knowledge. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, Sa2p Treed Filaments makes no warranty expressed or implied, with respect to completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. User should satisfy himself that he has all current data relevant to his particular use.