

# 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 : Polyolefin copolymer

Commercial name : Fortis LL

## 2. Use of substance / preparation

Additive printing filaments

## 3. Identification of the company

SA2P sas / Treedfilaments

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Ph. +39 0362320500

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## 4. Emergency phone number

+39 0362320500

## 1. Composition / information on ingredients

2. The preparation is composed by : polyolefin copolymer , colorant max 3% , additive max 5% .

## 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 through 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 ( CO<sub>2</sub> ) , 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 /m<sup>3</sup>

total powders : US TLV-TWA : 10 mg/m<sup>3</sup>

### 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 (CO<sub>2</sub>)

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

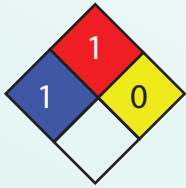
No limit existing .

## 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



### NFPA Hazard Rating

Health: 1 (slight)  
 Fire: 1 (slight)  
 Reactivity: 0 (minimal)

### HMIS 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

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