



# velleman®

## Material Safety Data sheet

**Velleman**  
(Brand)

**3 mm (1/8") PLA FILAMENT (different colors)**  
(Product name)

**PLA3x1 (x denotes color)**  
(Product identification)

**manufactured / imported by:**

VELLEMAN NV.  
Legen Heirweg, 33  
9890 Gavere  
Belgium

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### **Description:**

Plastic reel with 1kg of 3mm (1/8") PLA- filament for use with the K8200 3D printer. The reel is vacuum packed in plastic foil together with a bag of desiccant and stored in a cardboard box.

Specifications of the filament are:

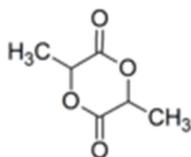
- Density: 1.25 g/cm<sup>3</sup> (@ 21.5 °C) / 0.045 lb/in<sup>3</sup> (@ 70.7 °F)
- Print temperature: 190-225 °C / 374-437 °F
- Impact strength: 5 kJ/m<sup>2</sup> / 2.38 ft-lb/in<sup>2</sup>

The filament is available in different colors

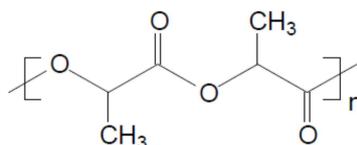
(x= N: natural, B: black, W: white, G: green, O: orange, P: pink, R: red, U: blue, Y: yellow)

### **Chemical Identification:**

Name: 3, 6-dimethyl-1, 4-dione polymer  
Family: Polyester  
Common names: Polylactacide, polylactic acid, PLA  
Formula: (C<sub>3</sub>H<sub>4</sub>O<sub>2</sub>)<sub>n</sub>  
Structure:



Lactide



Poly(lactide)

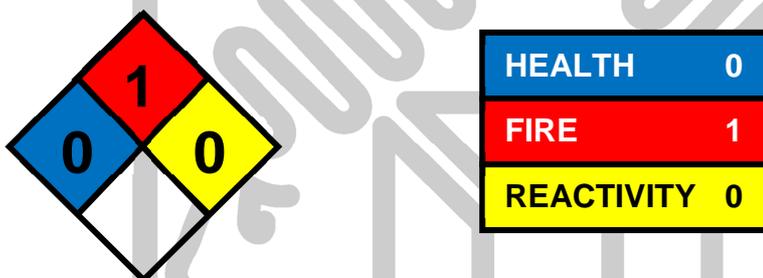
## Substances:

CAS nr.	identification	Hazard – risk
4511-42-6	L-Lactide	None known
95-96-5	DL-Lactide	None known
61063-13-9	Poly (DL-Lactide)	None known
33135-50-1	Poly (L-Lactide)	None Known

## Quality of selected polymers:

- Residual monomer < 0.5%
- Residual solvent < 0.05%
- Residual catalyst <200ppm
- Heavy metal < 10ppm
- Water content: ≤ 0.5%

## NFPA rating / HMIS rating:



## Health hazard information:

May cause mild skin and eye irritation if reacted with water

Medical conditions aggravated by exposure: none expected, based on available information

## First aid:

Eye contact: Solid or dust may cause irritation or corneal injury due to mechanical action

Skin contact: Essentially nonirritating to skin, mechanical injury only

Inhalation: No harmful effects expected, if any symptoms obtain medical support

Ingestion: No harmful effects expected, if any symptoms obtain medical support

## Precautions for safe handling and use:

For operations where eye or face contact can occur, eye protection is recommended

Avoid breathing dust

Hot and/or melted polymer can severely burn the skin – handle with care

Extrude only in a well-ventilated area, never burn filament, toxic gasses and vapors will be generated if exposed to fire.

## Exposure control methods:

Non for normal use

### **Fire and explosion hazard information:**

The material will burn if exposed to sufficient heat and an ignition source  
Avoid dispersion of dust in the air to reduce dust explosion hazard potential

#### **Fire-fighting:**

Use water, carbon dioxide, dry chemical powder or foam to extinguish fires  
Firefighters must wear self-contained positive pressure breathing apparatus and fully protective equipment

### **Reactive data:**

Stability: stable  
Incompatibility: stable  
Decomposition: slow reaction in the presence of water  
Polymerization: will not occur  
Combustion: carbon monoxide and/or carbon dioxide may form during combustion

### **Physical properties:**

Appearance: solid filament  
Solubility in water: reacts very slowly with water

### **Spill or leak procedures:**

Collect for disposal, use appropriate personal protective equipment during clean-up

### **Waste disposal:**

The material is non-hazardous and biodegradable  
Disposal must be made in accordance with the applicable governmental regulations.

### **Storage conditions:**

Keep dry in a cool place, when the plastic foil is opened store in a container together with a desiccant to maintain product quality. Keep the container closed until it is ready for use.

### **Shipping information:**

D.O.T.: not regulated as hazardous by D.O.T or I.M.O

**The contents and format of this MSDS/SDS are in accordance with REGULATION (EC) No 1907/2006, EU Commission directive 1999/45/EC, 1967/548/EEC**

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