## PROFESSIONAL 3D PRINTERS

# **COD** SAFETY DATA SHEET

## 1. Hazards identification

1.1 Classification of the substance or mixture classification Not dangerous according to Directive 1272/2008/EC.

Special advice on hazards 1.2

Danger of burns in contact with hot polymer and hazardous vapors in case of burning.

### 2. Composition/information on ingredients

2.1 Chemical characteristics: Polymer-blend based on PLA filled with 30% woodfibres and additives

2.2 CAS no: 9051-89-2

2.3 Additional information: No harmful ingredients.

### 3. First aid measures

3.1 Description of first aid measures

On skin contact:

In case of contact with molten polymer immediately cool the skin with cold water. Medical aid may be required to remove adhering material and for treatment of burns.

After inhalation:

After inhalation of decomposition gases or dust remove patient to fresh air. Contact a doctor in case of discomfort.

On ingestion:

No effects known. Rinse mouth with water and drink more water. Contact a doctor in case of discomfort

On eyes contact:

Rinse open eyes thoroughly with water.

### 4. Fire fighting measures

Extinguishing media 4.1 Suitable extinguishing media: Water spray, Dry powder, Carbon dioxide (CO2). Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

4.2 Special hazards arising from the substance or mixture During incomplete combustion release of carbon monoxide, carbon dioxide and hydrocarbons

WOOD SAFETY DATA SHEET - PAGE 1|4

### 4.3 Advice for fire fighters

Fire fighting measures:

Assure an extended cooling down period to prevent re-ignition. Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Unusual Fire Hazards:

Explosion: Avoid generating dust; fine dust dispersed in air in sufficient concentration and in the presence of an ignition source is a potential dust explosion hazard.

### 5. Accidental release measures

5.1 Personal precautions, protective equipment and emergency procedures Use suitable protective clothing. Avoid eye contact and inhalation of dusts. Keep ignition sources away

PROFESSIONAL 3D PRINTERS

### 5.2 Methods for cleaning up

Sweep up material and place in a container, risk of slipping, Avoid ingress of material into drainage systems.

### 6. Handling and storage

### 6.1 Handling

Avoid contact with molten polymer. Avoid generation of dust , inhalation of dusts. Keep ignition sources away.

### 6.2 Conditions for safe storage, including any incompatibilities

Protect against moisture. Store cool and keep packaging closed when not in use. Avoid sources of ignition

### 7. Exposure controls/personal protection

7.1 Control parameters

With suitable ventilation the threshold limits assumedly will not be reached. Avoid electrostatic charge by use of grounding cables

### 7.2 Personal safety equipment

Use adequate safety equipment, e.g. protective clothing, eye protection glasses, heat protection gloves. In case of dust formation wear mask with particle filter

### 8. Physical and chemical properties

| 8.1                                      | Information on basic physical and chemical properties |                            |  |
|--|---|----------------------------|--|
| Appearance:                              |   | Solid Filament             |  |
| Odour:                                   |   | depending on product grade |  |
| Colour:                                  |   | depending on product grade |  |
| Odour threshold :                        |   | No information available   |  |
| pH:                                      |   | Not applicable             |  |
| Melting/freezing point:                  |   | 140-150°C                  |  |
| Initial boiling point and boiling range: |   | Not applicable             |  |
| Flash point:                             |   | Not applicable             |  |
| Evaporation rate:                        |   | Not applicable             |  |
|  |   |                            |  |

WOOD SAFETY DATA SHEET - PAGE 2|4



| Flammability (solid, gas):               | No information available |
|--|--------------------------|
| Upper/lower flammability or              | UEL: No data available   |
| explosive limits:                        | LEL: No data available   |
| Vapour pressure:                         | Not applicable           |
| Vapour density:                          | Not applicable           |
| Relative density:                        | 1.1-1.2 g/cm3            |
| Solubility(ies):                         | Insoluble                |
| Partition coefficient (n-octanol/water): | Not available            |
| Auto-ignition temperature:               | No information available |
| Decomposition temperature:               | >230°C                   |
| Viscosity:                               | Not applicable           |
| Explosive properties:                    | none                     |
| Oxidizing properties:                    | none                     |

### 9. Stability

9.1 *Reactivity:* No information available

9.2 *Chemical stability:* Material is stable under normal conditions.

9.3 *Possibility of hazardous reactions:* No hazardous reactions observed under normal handling and storage conditions

9.4 Conditions to avoid:Avoid exposure to extreme heat and all sources of ignition. Thermal decomposition > 230°C.

9.5 Incompatible materials: Strong oxidizing agents

9.6 Hazardous decomposition products: Carbon monoxide, tetrahydrofuran, low molecular weight oligomers, carbon dioxide

### 10. Toxicological information

10.1 Information on toxicological effects Dust can cause irritation of eyes, respiratory organs and skin. After ingestion stomach pain or nausea are possible

### 10.2 Other remarks

Based on our state of knowledge and experience no injurious health effects are expected if product is properly handled for the designated use.

### 11. Ecological information

### 11.1 Toxicity

No negative ecological effects known at the present state of knowledge, test results are not available. Due to insolubility in water most probably not hazardous to aquatic organisms.

### 11.2 Bioaccumulative potential

Due to its consistency and insolubility in water biological accumulation is not expected

WOOD SAFETY DATA SHEET - PAGE 3|4



### 12. Disposal considerations

12.1 Waste treatment methods

Waste from residues / unused products

Generation of waste should be minimized, check possibility for recycling. Waste product can be incinerated or dumped together with domestic waste in compliance with local authority requirements.

Packaging

Packaging material has to be emptied completely and disposed in accordance with the regulations. Packaging can be recycled if not contaminated.

### 13. Transport information

Product has been classified as being non-dangerous substance according to transport regulations ADR, ADNR, RID, IMDG, IATA/ICAO

UN number 13.1 Not applicable UN proper shipping name 13.2 Not applicable 13.3 Transport hazard class(es) Not applicable Packing Group 13.4 Not applicable Environmental hazards 13.5 No additional data is available 13.6 Special precautions for user No data available Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 13.7 Not evaluated

### 14. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture 14.1 This product does not require a hazard warning label in accordance with EC Directives.

### 15. Other information

Information is referenced from other manufacturers.

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 and Regulation (EC) No. 2015/830. Label element according to Regulation (EC) No 1272/2008.

The information provided in this Safety Data Sheet 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 relates only 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.

WOOD SAFETY DATA SHEET - PAGE 414