Date of issue :01.02.2015Version:AK15-00Product Name:Elite PLA

3D PRINTING MATERIALS
Material Safety Data Sheet

EU Directive 1907/2006

1. Identification of the substance/preparation and of the company/undertaking

1.1 Trade name: Elite PLA

1.2 Use of the product: 3D Printing Filament

1.3 Supplier: OOKUMA Additive Manufacturing Technologies and

Materials, Inc.

Atatürk Oto San. Sit. 2. Kısım 5. Sok. No:113

Maslak İST.

Phone: 0090 850 811 6781 Fax: 0090 850 811 6781

Emergency phone number: 0090 850 811 6781

2. Hazards identification

2.1 Classification: Not dangerous according to Directive 67/548/EEC

2.2 Special advice on hazards: Danger of burns in contact with hot polymer.

Burning produces obnoxious and toxic fumes. Avoid

formation of dust and aerosols.

Composition / information on ingredients

3.1 Chemical characteristics: Biodegradable polymer-blend based on polylactic acid

(>%98).

3.2 CAS no: PLA : 9051-89-2

3.3 Additional information: no harmful ingredients

4. First-aid measures

4.1 On skin contact: In case of contact with molten polymer rinse

immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a

physician.

4.2 After inhalation: After inhalation of decomposition gases or dust Move to

fresh air. Call a physician immediately.

4.3 On ingestion: No effects known. Drink water as a precaution. Never

give anything by mouth to an unconscious person. Do not induce vomiting without medical

advice. Call a physician immediately.

4.4 On eyes contact: Rinse immediately with plenty of water, also under the

eyelids, for at least

15 minutes. Call a physician immediately.

Fire-fighting measures

5.1 Suitable fire Foam. Water. Carbon dioxide (CO2). Dry chemical. Alcohol extinguishing media: resistant foams are preferred if available. General-

purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}{2}\left(\frac{1}{2}\right)$

5.2 Special exposure hazards: During incomplete combustion release of carbon monoxide,

carbon dioxide and hydrocarbons.

5.3 Special protective As in any fire, wear self-contained breathing apparatus

equipment: pressure-demand and full protective gear.

5.4 Remark: Fine dust dispersed in air may ignite. Risks of ignition followed by flame propagation or secondary explosions

followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust,

e.g. on floors and ledges.

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6. Accidental release measures

6.1 Personal precautions: Use suitable protective clothing. Avoid eye contact and

inhalation of dusts. Keep ignition sources away.

6.2 Methods for cleaning up: Shovel into suitable container for disposal. Avoid

ingress of material into drainage systems.

7. Handling and storage

7.1 Handling: Avoid contact with molten polymer with skin and eyes.

Avoid dust formation. Low hazard for usual industrial or commercial handling. Use personal protective equipment $% \left(1\right) =\left(1\right) +\left(

7.2 Storage: Store in cool place. Keep at temperatures below 50 °C.

No special restrictions on storage with other products.

Protect against moisture.

8. Exposure controls/ personal protection

8.1 Technical safety measures: With suitable ventilation the threshold limits

assumably will not be reached. Avoid electrostatic

charge by use of grounding cables.

8.2 Personal safety equipment: Use adequate safety equipment as protective clothing,

eye protection glasses with side-shields, heat

protection gloves.

In case of dust formation wear mask with particle

filter.

8.3 Work hygiene: No eating or drinking during working.

Avoid contact of hot material with the skin.

Avoid breathing dust and vapours.

9. Physical and chemical properties

9.1 Form: Filaments
9.2 Color: Pigmented
9.3 Odor: Sweet

9.4 Melting range: Not Determined

9.5 Oxidising properties: not self igniting / not flammable

9.6 Explosions limits: not applicable
9.7 Density: 1.24 g/cm³
9.8 Solubility in water: None known

10. Stability and reactivity

10.1 Stability: Stable under recommended storage conditions

10.2 Conditions to be avoided: Avoid exposure to extreme heat and all sources of

ignition. Thermal decomposition > 230°C.

10.3 Substances to be avoided: Oxidizing agents, strong bases.

10.4 Hazardous decomposition Burning produces obnoxious and toxic fumes. Aldehydes.

products

Carbon monoxide (CO). carbon dioxide (CO2).

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11. Toxicological information

11.1 Local irritation: May cause eye/skin irritation. Product dust may be

irritating to eyes, skin and respiratory system. Caused mild to moderate conjuctival irritation in eye irritation studies using rabbits. Caused very mild redness in dermal irritation studies using rabbits (slightly irritating). Ingestion may cause

gastrointestinal irritation, nausea, vomiting and

diarrhea.

11.2 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.

12. Ecological information

12.1 Ecotoxical effects: EC50/72h/algae > 1100 mg/L 12.2 Biological degradation: Inherently biodegradable. 12.3 Bioaccumulation: Does not bioaccumulate.

13. Disposal considerations

13.1 Waste from residues /

unused products :

In accordance with local and national regulations. Do not contaminate ponds, waterways or ditches with chemical or used container. Contact manufacturer.

13.2 Uncleaned packaging:

Packaging material has to be emptied completely and

disposed in accordance with the regulations.

14. Transport information

14.1 Transport regulations:

Not classified as hazardous under transport

ADR, ADNR, RID, ICAO/IATA, IMDG/GGVSee, ICAO/IATA

15. Regulatory information

15.1 EU regulations:

This product does not require a hazard warning label

in accordance with EC Directives.

16. Other information

Oo-kuma urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's \prime user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

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