

SAFETY DATA SHEET: EBM.11

By Emamou



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Language: English

I. Product Identification

1. Product name: EBM.11 (PLA 95%)

2. Composition:

Composition	CAS No.	Chemical Formulation	Content (%)
Polylactic Acid Resin (PLA)	9051-89-2	$H[(-OCH(CH_3))CO-]_nOH$	> 95
Impact Modifier	confidential	confidential	< 5

Poisonous and Deleterious Substances Control Law: Not applicable

II. Supplier Information

A recognised biodegradable plastic company in The Republic of Korea



III. First Aid Measures

- Inhalation: If exposed to vapour or gas, move to fresh air area and consult a physician if necessary.
- Eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Rinse thoroughly the inner side of the eye lid. Call a physician if necessary.
- Skin contact: In case of contact with melted material, fully cool down by pouring plenty of water over the clothing. Then take off clothing, cover with clean gauze and get medical attention immediately.

Get medical attention if skin colour changes, irritating pain occurs or feeling unwell.

- Ingestion: If swallowed by accident, keep at rest and get medical attention immediately. If vomiting occurs, keep head lower than hips to prevent severe nausea. Consult a physician if necessary.
- Protection of the first aid staff: Wear appropriate protective equipments (protective glasses, protective mask, gloves, etc.). Install ventilation.

IV. Firefighting Measures

- Suitable extinguisher media: All types of fire extinguisher
- Specific firefighting method, protection for fire-fighter:

Firefighters respond to fire in vicinity

Wear appropriate protective equipment (heat-proof clothing, etc.).

Remove flammable substances from surroundings immediately.

Fight fire from windward

Restrict the area around the fire to avoid entrée of unauthorized personnel and prevent secondary disaster.

V. Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures:
 - Wear appropriate protective equipment (gloves, protective mask, goggles, etc.).
 - Collect residuals of filament on the floor frequently as they cause it slippery.
- Methods, materials for containment and cleaning up:
 - Treat the contaminated materials and wastes in accordance with relevant laws and regulations.
 - If materials are released, sweep and collect them into a container.



VI. Handling and storage

- PRECAUTIONS TO BE TAKEN IN HANDLING:

Handle in a well-ventilated area.

Local exhaust at 3D printers area is recommended when many printers are operated at once.

Keep materials away from fire (ignition source) and store at ambient temperature.

- PRECAUTIONS TO BE TAKEN IN STORING:

Protect materials from water, moisture and direct sunlight and store indoors at ambient temperature and well-ventilated.

VII. Exposure and Protection

Respiratory protection: Wear appropriate protective equipment to avoid inhalation of gas generated from high temperature molten resin.

Hand protection: Wear protective gloves. It is recommended to wear cotton work gloves or leather gloves when handling the molten resin.

Eye protection: Wear protective glasses when handling materials.

Skin & body protection: Wear protective clothing to avoid direct skin exposure to molten resin, when handling.

VIII. Physical and Chemical Properties

Physical state:	Solid (Filament)
Melting point:	170 ~ 190°C
Specific gravity (relative density):	1.24~1.25 g/cm ³
Solubility:	Insoluble in water and other volatile solvent.

IX. Stability and reactivity

Stability (possibility of hazardous reactions):	PLA 95% is highly stable under normal storing/handling conditions. It is resistant to hydrolysis in ambient condition but it is advised to avoid excessive humidity, heat and light during storage and handling.
Self-reactivity:	No



X. Toxicological Information

Acute toxicity (oral):	Rat LD50 > 5,000 mg/kg
Germ cell mutagenicity:	AMES Test Negative

XI. Ecological information

Acute aquatic environmental hazards:	Fish (<i>Oryzias latipes</i>) LC50 > 100 mg/L. Not available.
Persistence and Decomposition:	Compostable when exposed to excessive heat and humidity for a long period

XII. Disposal Information

Do not dump the materials into sewers, on the ground or into any water body. Burn the waste in an adequate incinerator or bury it if allowed in landfill in accordance with applicable regional, national, and local regulations.

XIII. Transport Information

Follow the instructions in "HANDLING AND STORAGE".

Road transport:	Follow all regulations in the present country.
International transport:	UN classification: Not applicable to the dangerous goods under UN classification.

XIV. Regulatory Information

Follow all applicable laws and regulations

XV. Other Information

This (M)SDS is a Hazardous Communication tool and should be used to assist in the Risk Management. There are other factors to determine risks, e.g. by reference to exposures scenarios, scales of use, frequency of use, current or available engineering controls.

This information is based on our current knowledge and is intended to describe the materials for the purpose of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the products. When process PLA resin after more than 12 months of storage, re-dry it before processing.



Our services

- **Provide in-depth consultation** on how to process or use specific materials and products
- **Design and deliver products** to your specific requirements

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