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	Material Safety Data Sheet	Revision Date	2022.12.03

MATERIAL SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

Product name	IEMAI 3D printing filament	Product code	ESD-PETG
Product use	A filament to be used in 3D printing applications.		

Revision date: 03/12/2022

Manufacturer / supplier:

Dongguan Imai Intelligent Technology Co.,Ltd

Address:

3 / F, Building C, Kanghuier Industrial Park, 178 Yongjun Road, Shuilang, Dalingshan Town,
Dongguan City, China.

Responsible / issuing person:


info@iemai3d.com

Emergency telephone numbers:

+86-769-83060912

2. HAZARDS IDENTIFICATION

Adverse human health effects: None.

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Environmental effects: None.

Physical and chemical hazards: None.

Special hazards: None.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	PETG	Carbon Nanotube
CAS number	25038-91-9	308068-56-6
Weight	95%	5%

Remarks: No hazardous ingredients

4. FIRST AID MEASURES

Inhalation:


After inhalation of decomposition products, remove the affected person to a source of fresh air and keep calm. Call a physician immediately in case of discomfort.

Skin contact:

Areas affected by molten material should be quickly placed under cold running water or saline. Burns caused by molten material require hospital treatment.

Eye contact:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Call a physician immediately.

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Ingestion:

Rinse mouth and then drink plenty of water. If difficulties occur, seek medical attention.

Most important symptoms and effects, both acute and delayed symptoms:

Related information can be found in section 11.

Indication of any immediate medical attention and special treatment needed:

No data available.

5. FIRE- FIGHTING MEASURES

Suitable extinguishing media:

Foam, water spray, dry powder or carbon dioxide.

Avoid using DC water to extinguish the fire. Direct current water may cause splashing of flammable liquids and spread the fire.

Special hazards arising from the substance or mixture:


No data available

Advice for firefighters:

Firefighters should wear a gas-filled respirator or an activated carbon mask, wear a full-body fire suit and extinguish the fire in the upwind direction.

Move the container from the fire to the open space as much as possible.

If the container in the fire has changed color or sounded from a safe pressure relief device, it must be evacuated immediately.

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Isolation of the accident site, prohibiting unrelated personnel from entering. Contain and handle fire water to prevent environmental pollution.

Further information:

No data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions:

No special environmental precautions required.

Methods and material for containment and cleaning up:


Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Reference to other sections:

Information regarding exposure controls / personal protection and disposal considerations can be found in section 8 and 13.

7. HANDLING AND STORAGE

Precautions for safe handling:

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Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage, including any incompatibilities:

Store in a cool place at room temperature and humidity. Keep container tightly closed in a dry and well-ventilated place.

Specific end uses:

No data available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Components with workplace control parameters.

Engineering measures:

Provide sufficient air exchange and /or exhaust in work rooms.


Handle product only in closed system or provide appropriate exhaust ventilation at machinery.

Apply measures to prevent dust explosions.

Respiratory protection:

Respiratory protection not required. For nuisance exposures, use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection:

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Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Immersion protection

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: > 480 min

Material tested: Dermatril® (Aldrich Z677272, Size M)

Splash protection

Material: Nitrile rubber


Minimum layer thickness: 0,11 mm

Break through time: > 30 min

Material tested: Dermatril® (Aldrich Z677272, Size M)

Data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, email sales@kcl.de,

test method: EN374

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If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye / face protection:

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Body protection:

Impervious clothing; the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

General safety and hygiene measures:

Avoid contact of molten material with skin. Avoid inhalation of dusts / mists / vapors.

Eye wash fountains and safety showers must be easily accessible.


Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Filament.

Color: Black.

Odour: Odorless.

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Odor threshold: Not determined.

pH Value: No data available.

Melting point / freezing point: 80°C.

Boiling point / boiling range: Not determined.

Flash point: Not determined.

Evaporation rate: No data available.

Ignition temperature: No data available.

Upper / lower flammability or explosive limits: Non-explosive.

Vapor pressure: No data available.

Vapor density: No data available.

Density: 1.20 g/cm³.

Solubility in water: No data available.

Partition coefficient (n-octanol / water): No data available.

Auto ignition temperature: No data available.


Decomposition temperature: No data available.

Viscosity: No data available.

10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: No data available

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Possibility of hazardous reactions: No data available

Conditions to avoid: No data available

Incompatible materials: Strong oxides, strong acids, strong bases.

Hazardous decomposition products: No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

No data available.

Skin corrosion / irritation:

No data available.

Serious eye damage / eye irritation:

No data available.

Respiratory / skin sensitization:

No data available.

Germ cell mutagenic:


No data available.

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified

as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity:

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No data available.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure):

No data available.

Aspiration hazard:

No data available.

Additional Information:

RTECS: Not available.

12. ECOLOGICAL INFORMATION

Toxicity: No data available.

Persistence and degradability: Product is not biodegradable.

Bio accumulative potential: No data available.

Mobility in soil (and other compartments if available): No data available.


Results of PBT and vPvB assessment: No data available

Other adverse effects: No data available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Product

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Recycle as much as possible. If it cannot be recycled, use incineration for disposal or consult a licensed waste disposal unit for proper disposal. When burying, it must be implemented in accordance with government regulations. The finished product or waste after heat molding does not decompose at normal temperature.

Remember: Do not allow spills and cleaning waste to flow into municipal sewers and open bodies of water.

Contaminated packaging

Return the container to the manufacturer or dispose of it in accordance with national and local regulations.

14. TRANSPORT INFORMATION

UN number: Not classified as a dangerous good.

UN proper shipping name: Not classified as a dangerous good.


Transport hazard class(es): Not classified as a dangerous good.

Packing group: Not classified as a dangerous good.

Environmental hazards: Not classified as a dangerous good.

Special precautions for user: Shipping classifications may vary depending on the size of the container and the regulations of the country or region.

15. REGULATORY INFORMATION

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Safety, health and environmental regulations / legislation specific for the substance or mixture:

Regulatory information Please note that waste disposal should also comply with local regulations.

If applicable, the chemical meets the requirements of the Regulation on the Safety Management of Dangerous Chemicals (adopted by the State Council on January 9, 2002).

Chemical safety assessment:

No data available

16. OTHER INFORMATION

The information in this Material Safety Data Sheet (MSDS) is based on current knowledge and experience. No liability can be assumed for the accuracy and completeness of this information.