

Safety data sheet

Regulation (EC) 1907/2006 and 1272/2008

Printing date: 1.11.2025

Version number: 1

Revision date: 1.11.2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
 - **Trade name:** PLA + filament
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
 - **Application of the substance / the mixture:** 3D printing
- **1.3 Details of the supplier of the safety data sheet**
 - **Manufacturer / Supplier:** SHENZHEN ESUN INDUSTRIAL CO.,LTD.
 - **Full address:**
15A, MICROSOFT KETONG BUILDING, NO. 55 GAOXINNAN 9TH ROAD, HIGH TECH COMMUNITY, YUEHAI STREET, NANSHAN DISTRICT, SHENZHEN.
 - **Phone number:** 0755 86393186
 - **Email:** bright@esungroup.net
- **Only Representative / other EU contact point:** Not available
- **1.4 Emergency telephone number:**
IRELAND
National Poisons Information Centre
Tel: +353 (01) 809 2566 (For healthcare professionals)
+353 (01) 809 2166 (For public: 8am - 10pm)
- **1.5 Reference Number:** CANPH25014792704, WHPL2506000595
- **1.6 Remark:**
This product is likely to be classified as article with substances not intended to be released and is out of scope of a SDS as set out in Regulation (EC) No 1907/2006. This SDS is generated for applicant's reference only.

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
 - **Classification according to Regulation (EC) No 1272/2008**
The product is not classified according to the CLP regulation.
- **Information concerning particular hazards for human and environment:**
The product has not to be labelled due to the calculation procedure of Regulation (EC) No. 1272/2008.
- **Classification system:**
The classification is according to the latest edition of EU Regulation (EC) No. 1272/2008, and extended by company and literature data.
- **2.2 Label elements**
 - **Labelling according to Regulation (EC) No. 1272/2008** Not applicable
 - **Hazard pictograms** Not applicable
 - **Signal word** Not applicable
 - **Hazard-determining components of labelling:** Not applicable
 - **Hazard statements** Not applicable
 - **Precautionary statements** Not applicable
- **2.3 Other hazards:**
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable
 - **vPvB:** Not applicable
 - **Determination of endocrine-disrupting properties** Not applicable

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SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· Description:

Mixture of the substances listed below with nonhazardous additions.
For the wording of the listed hazard statements refer to section 16.

· Composition:

CAS: 26100-51-6	Poly(lactic acid)	92.1-93.2%
CAS: 143106-82-5	Graft polymer of allyl methacrylate / butyl acrylate / decamethylcyclopentasiloxane / 3-[dimethoxy(methyl)silyl] propyl methacrylate / hexamethylcyclotrisiloxane / methyl methacrylate / octamethylcyclotetrasiloxane	5.0%
CAS: 471-34-1 EINECS: 207-439-9	Calcium carbonate Substance with a Union workplace exposure limit	1.8-2.9%

SECTION 4: First aid measures

· 4.1 Description of first aid measures

- **General description:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

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

No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· 5.2 Special hazards arising from the substance or mixture:

No further relevant information available.

· 5.3 Advice for firefighters

- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures:

Not required.

· 6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Pick up mechanically.

· 6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling:**
No special measures required.
For the general occupational hygienic measures refer to Section 8.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s):** No further relevant information available.

SECTION 8: Exposure controls/personal protection

• 8.1 Control parameters

• **Ingredients with limit values that require monitoring at the workplace:**

CAS: 471-34-1 Calcium carbonate

VLEP (France) Long-term value: 10 mg/m³

- **Regulatory information** VLEP (France): ED 1487 26.04.2024
- **DNELs:** Not available
- **PNECs:** Not available

• **Additional information:** The lists valid during the making were used as basis.

• 8.2 Exposure controls

Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure.

- **Appropriate engineering controls:** See Section 7 for information about design of technical facilities.
- **Individual protection measures, such as personal protective equipment**
- **Respiratory protection:** Not required.
- **Hand protection:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

• **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

• **Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye/face protection:** Not required.
- **Body protection:** Protective work clothing
- **Thermal hazards:** Not required for normal conditions of use.

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- **Environmental exposure controls:**
Control measures must be made in accordance with Community environmental protection legislation.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

- **Physical state:** Solid
- **Colour:** According to product specification
- **Odour:** Odorless
- **Odour threshold:** Not available
- **Melting point/Freezing point:** 155~175 °C
- **Boiling point or initial boiling point and boiling range:** Not available
- **Flammability:** Not available
- **Lower and upper explosion limit**
- **Lower:** Not available
- **Upper:** Not available
- **Flash point:** Not available
- **Auto-ignition temperature:** Not available
- **Decomposition temperature:** > 260 °C
- **pH:** Not available
- **Viscosity**
- **Kinematic viscosity:** Not available
- **Dynamic viscosity:** Not available
- **Solubility**
- **Water:** Insoluble in water
- **organic solvents:** Soluble in organic solvents
- **Partition coefficient n-octanol/water (log value):** Not available
- **Vapour pressure:** Not available
- **Density and/or relative density**
- **Density:** Not available
- **Relative density:** 1.24
- **Relative vapour density:** Not available
- **Particle characteristics:** Not available

· 9.2 Other information

- **Appearance:**
- **Form:** Solid

· Information with regard to physical hazard classes

- **Explosives:** Not applicable
- **Flammable gases:** Not applicable
- **Aerosols:** Not applicable
- **Oxidising gases:** Not applicable
- **Gases under pressure:** Not applicable
- **Flammable liquids:** Not applicable
- **Flammable solids:** Not applicable
- **Self-reactive substances and mixtures:** Not applicable
- **Pyrophoric liquids:** Not applicable
- **Pyrophoric solids:** Not applicable
- **Self-heating substances and mixtures:** Not applicable
- **Substances and mixtures, which emit flammable gases in contact with water:** Not applicable
- **Oxidising liquids:** Not applicable
- **Oxidising solids:** Not applicable
- **Organic peroxides:** Not applicable
- **Corrosive to metals:** Not applicable

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| · Desensitised explosives: | Not applicable |
| · Other safety characteristics: | Not available |

SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No further relevant information available.
- **10.2 Chemical stability:** No further relevant information available.
- **10.3 Possibility of hazardous reactions:** No dangerous reactions known.
- **10.4 Conditions to avoid:** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

CAS: 471-34-1 Calcium carbonate

Oral	LD50	6,450 mg/kg (rat)
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- **Skin corrosion/irritation:** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation:** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitization:** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.
- **11.2 Information on other hazards**

- **Endocrine disrupting properties:**

None of the ingredients is listed.

- **Other information:** No further relevant information available.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability:** No further relevant information available.
- **12.3 Bioaccumulative potential:** No further relevant information available.
- **12.4 Mobility in soil:** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable
- **vPvB:** Not applicable
- **12.6 Endocrine disrupting properties:**
- The product does not contain substances with endocrine disrupting properties.

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- **12.7 Other adverse effects:** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation:** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- | | |
|---|--|
| · 14.1 UN number or ID number | Not applicable |
| · ADR/RID/ADN, IMDG, IATA | Not applicable |
| · 14.2 UN proper shipping name | Not applicable |
| · ADR/RID/ADN, IMDG, IATA | Not applicable |
| · 14.3 Transport hazard class(es) | |
| · ADR/RID/ADN, IMDG, IATA | |
| · Class | Not applicable |
| · Label | - |
| · 14.4 Packing group | |
| · ADR/RID/ADN, IMDG, IATA | Not applicable |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user: | Not applicable |
| · Hazard identification number (Kemler code): | - |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable |
| · 14.8 Transport/Additional information: | Not dangerous according to the above specifications. |
| · UN "Model Regulation": | Not applicable |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category** Not applicable
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** Not applicable
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** Not applicable

· **REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)**

None of the ingredients is listed.

· **Regulation (EU) No 649/2012**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

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• **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

• **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

• **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

• **REGULATION (EU) 2024/590 on substances that deplete the ozone layer**

None of the ingredients is listed.

• **Other regulations, limitations and prohibitive regulations**

• **SVHC Candidate List of REACH Regulation Annex XIV Authorisation (21/1/2025)**

None of the ingredients is listed

• **REACH Regulation Annex XVII Restriction (23/6/2025)
See Section 16 for information about restriction of use.**

None of the ingredients is listed

• **REACH Regulation Annex XIV Authorisation List (13/11/2023)**

None of the ingredients is listed

• **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

• **Recommended restriction of use** Not applicable

The contents and format of this SDS are in accordance with Regulation (EC) No 1907/2006, 1272/2008 and Regulation (EU) No 2020/878.

DISCLAIMER OF LIABILITY

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• **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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