Safety Data Sheet(SDS)

According to GHS

Product name: PCL Filament **Prepared by GB/T 16483 and GB/T 17951**

Revision date: 2021.5.15 **SDS Number: SLFDM2105016**

Initial date: 2017.5.15 **Version: 5.1**

Section 1 - Identification of the substance/preparation and of the company/undertaking

Product identifier

Product name: PCL filament

Relevant identified uses of the substance or mixture and uses advised against

Details of the supplier of the safety data sheet

Manufacture/Supplier : Zhuhai SUNLU Industrial Co., Ltd.

Address: Room 501C, Building 2 No.35 Jinzhou Road, Tianjiawan Town, High-tech District, Zhuhai Guangdong China.

Tel: (086) 0756 3385639

E-mail : jk@sunlugw.com

Fax : (086)0756 3385639

Further information obtainable from: Zhuhai SUNLU Industrial Co.,Ltd

Section 2 - Hazards Identification

	Min	Max
Flammability	1	
0=Minimum		
Toxicity	0	1=Low
Body Contact	2	2=Moderate
Reactivit	1	3=High
Chronic	2	4=Extreme

GHS classification

Not Applicable

Label elements:

GHS label elements

Not Applicable

SIGNAL WORD:

Not Applicable

Section 3 –Composition/Information on Ingredients

Ingredient Name	CAS No.	Content (%)
Polycaprolactone	24980-41-4	100

Section 4 - First Aid Measures

INGESTION

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

EYE

If this product comes in contact with eyes:

- Wash out immediately with water.
- If irritation continues, seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

Inhalation

- If fumes, aerosols or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.

Section 5 - Firefighting Measures

EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.

- Prevent, by any means available, spillage from entering drains or water courses.
- Use water delivered as a fine spray to control fire and cool adjacent area.

FIRE/EXPLOSION HAZARD

- Combustible solid which burns but propagates flame with difficulty.
- Organic powders when finely divided over a range of concentrations regardless of particulate size or shape and suspended in air or some other oxidizing medium may form explosive dust-air mixtures and result in a fire or dust explosion (including secondary explosions).

FIRE INCOMPATIBILITY

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc.as ignition may result

Section 6 –Accidental Release Measures

MINOR SPILLS

- Generally not applicable

MAJOR SPILLS

- Generally not applicable

Personal Protective Equipment advice is contained in Section 8 of the SDS.

Section 7 - Handling and Storage

PROCEDURE FOR HANDLING

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with incompatible materials.
- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.

SUITABLE CONTAINER

- Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.
- Packing as recommended by manufacturer.

STORAGE INCOMPATIBILITY

Avoid contamination of water, foodstuffs, feed or seed.

- Avoid reaction with oxidising agents

Section 8 - Exposure Controls, Personal Protection

EXPOSURE CONTROLS

Appropriate engineering controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

Personal protection



Eye and face protection

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.

Skin protection

See Hand protection below

Hands/feet protection

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical 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.

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and.has to be observed when making a final choice.

Suitability and durability of glove type is dependent on usage.

Body protection

See Other protection below

Other protection

- Overalls.
- P.V.C. apron.
- Barrier cream.

Section 9 - Physical and Chemical Properties Information on basic physical and chemical properties

Odour	**Odorlessness**
Form	Solid
Melting Range (°C)	No data
Boiling Range (°C)	No data
Flash Point (°C)	No data
Decomposition Temp (°C)	No data
Autoignition Temp (°C)	No data
Upper Explosive Limit (%)	No data
Lower Explosive Limit (%)	No data
Volatile Component (%vol)	No data
Solubility in water (g/L)	Insoluble in water
p H (1% solution)	No data
p H (as supplied)	No data
Print Temp (°C)	60-90
Bed Temp(°C)	No Heat
Density(g/cm^3)	1.2
Heat Distortion Temp（℃,0.45MPa）	No data
Melt Flow Index（g/10min）	2
Tensile Strength（MPa）	20
Elongation at Break（%）	500
Flexural Strength（MPa）	No data
Flexural Modulus（MPa）	No data
IZOD Impact Strength（kJ/m^2）	No data

Section 10 - Stability

and Reactivity

Reactivity

See section 7

Chemical stability

- Unstable in the presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerization will not occur.

Section 11 - Toxicological Information
Information on toxicological affects
Acute Toxicity
LD/LC50 values relevant for classification
No data.
Primary irritant effect
On the skin
No data.
On the eyes
No data.
Inhaled
No data.
Sensitization： No data.
Section 11 - Toxicological Information
Information on toxicological affects
Acute Toxicity
LD/LC50 values relevant for classification
No data.
Primary irritant effect
On the skin
No data.
On the eyes
No data.
Inhaled
No data.
Sensitization： No data.

Section 12 - Ecological Information

Ingredient	**Persistence:Water/Soil**	**Persistence: Air**
Bioaccumulation	**Mobility**	

Polycaprolactone LOW LOW
LOW LOW

Section 13 - Disposal Considerations

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each
user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for
its intended use.

Section 14 - Transport Information

Labels Required

Marine Pollutant: NO

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS:

ADR, IATA, IMDG,ADN

Section 15 - Regulatory Information

REGULATIONS

The product needs to follow local regulations.

Section 15 - Regulatory Information

REGULATIONS

The product needs to follow local regulations.

Section 16 - Other Information

This information is based on our present knowledge. However, this shall not constitute a guarantee for
any specific product features and shall not establish a legally valid contractual relationship.

***End ***