

Material Safety Data Sheet

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

Product:	Polycaprolactone
Manufacturer:	Conrad Electronic SE
Address:	Klaus-Conrad-Str. 1, D-92240 Hirschau
Telephone:	+49 (0) 9604 / 40 - 8988
Date:	21.07.2021

2. Hazards Identification

Classification of the substance or mixture

Polycaprolactone is not hazardous. GHS markings are not required.

Emergency Overview

Route of Entry

Inhalation, Skin, Ingestion.

Potential Effects of exposure

Skin Contact

Decomposition gases may be irritating to the skin.

Ingestion

Minimal hazard expected in normal industrial use.

Eyes

Mechanical irritation from particulates generated by product.

Inhalation

Dust particles may require cleaning of nasal passages.

3. Composition/information on ingredients

Component

2-Oxepanone, homopolymer

CAS No

24980-41-4

Content

>99%

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4. First Aid Measures

General advice

No specific treatment is necessary.

Skin Contact

Remove contaminated clothing. Wash skin with soap and water. Get medical attention if symptoms develop. Molten polymer can burn skin. After contact with the molten product, cool rapidly with cold water.

Eye contact

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms develop.

Ingestion

If subject is completely conscious, do not feed anything. After swallowing, If symptoms persist consult doctor.

Medical treatment/Notes to Physician:

None.

5. Fire Fighting Measures

Auto-ignition Temperature

No data.

Unusual Fire and Explosion Hazards

No data.

Common Extinguishing Methods

Powder, Foam, AFFF, CO₂, Water, Water spray.

Fire Extinguish

Product is considered non-flammable. Remove a source of fire. Use a fire extinguisher.

Extinguishing media

Dry Chemicals, Water, carbon dioxide (CO₂), foam.

Specific hazards

Formation of dangerous gas/vapors in case of decomposition, possible build up of electrical charges which could cause a fire by electrical discharge.

Protective measures in case of intervention:

Evacuate all non-essential personnel. Intervention only by capable personnel who are trained and aware of the hazards of the product. Wear self-contained breathing apparatus when in close proximity or in confined spaces.

Other precautions:

If safe to do so, remove exposed containers, or cool with large quantities of water. As with any fire, clean and ventilate room before reentry.

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6. Accidental Release Measures

Precautions

Spilled material may cause slipping hazard.

Cleanup methods

Solid: Collect the product with suitable means avoiding dust formation. Place material into a closed, labeled container compatible with the product. Place the container in a safe and isolated place.

Molten solid: If possible dam large quantities of molten solid with sand or earth and allow to solidify. Place into a closed labeled container compatible with the product. Place the container in a safe and isolated place. Clean the spill area with large quantities of water.

Precautions for protection of the environment

Avoid discharges into the environment (sewers, rivers, soils, etc.) and take any measure required by applicable federal, state and local laws.

7. Handling And Storage

Handling

Use electrically conductive materials for piping circuits and equipment. Avoid heating product above decomposition temperature.

Storage

Keep in the original packaging, closed.

Store in dry area. Keep away from ignition and heat sources.

Packaging material

Polyethylene plastic containers etc.

Other precautions

Use grounded equipment. No open flames or sparks. No smoking. Prevent electrostatic discharge. Avoid dust and formation of dust clouds. Warn personnel of the dangers of the product.

Packing

Paper bags. Polypropylene sacks.

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8. Exposure Controls/Personal Protection

Respiratory protection

Use appropriate respiratory protection.

Hand protection

Where contact is likely, wear chemical-resistant gloves (PVC).



Eye protection

Wear safety glasses with side shields. Wear chemical splash goggles and face shield, if risk of splashing.



Skin protection

Where contact is likely, wear chemical-resistant gloves, a chemical suit and boots. Recommended materials are PVC, neoprene or rubber.

Wear appropriate thermal protection when handling hot material.

Wear chemical protective clothing in dusty areas.

Other precautions

Provide a shower and eyewash station.

Consult your industrial hygienist or safety manager for the selection of personal protective equipment suitable for the working conditions.

9. Physical And Chemical Properties

Appearance: White solid

Odor: Odorless

Important Health, Safety and Environmental information

Melting point: 58-60 °C (136-140 °F)

Boiling point: Not determined

Flash point: 275 °C (527 °F)

Flammability: Non-flammable

Explosive Properties: Product does not present an explosion hazard.

Density at 60 °C (140 °F): 1.1±0.05g/cm³

Solubility: Insoluble in water; Soluble in aromatic solvents and chlorinated hydrocarbons.

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10. Stability And Reactivity

Thermal decomposition/conditions to be avoided

To avoid thermal decomposition do not overheat.

Materials and substances to avoid

Avoid contact with acids.

Hazardous decomposition products

Possible decomposition and release of monomer at temperatures above 200 °C

11. Toxicological Information

Acute toxicity

LD/LC50 values that are relevant for classification: Not available.

Primary irritant effect

On the skin: No irritant effect.

On the eye: No irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12. Ecological Information

Acute ecotoxicity

The product is not classified as dangerous to the environment.

Degradation

The product is readily biodegradable.

Other adverse effects/Comments

Ingestion of pellets by wildlife and fish may cause satiation(fullness) or bowel constriction. Consult the society of the Plastics Industry's Clean Sweep Program to assure minimal impact to the environment.

13. Disposal Considerations

Recommendation

Disposal must be made according to official regulations.

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14. Transportation Information

	ADR/RID	IMDG	IATA
UN Number	no data available	no data available	no data available
UN proper shipping name	Not dangerous goods	Not dangerous goods	Not dangerous goods
Transport hazard class(es)	no data available	no data available	no data available
Packaging group	no data available	no data available	no data available
Environmental hazards	No	No	No

15. Regulatory Information

Safety, health and environmental regulations specific for the product in question

European Inventory of Existing Commercial Chemical Substances (EINECS): Not Listed.

EC Inventory: Not Listed.

United States Toxic Substances Control Act (TSCA) Inventory: Listed.

China Catalog of Hazardous chemicals 2015: Not Listed.

New Zealand Inventory of Chemicals (NZIoC): Listed.

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed.

Vietnam National Chemical Inventory: Listed.

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC): Listed.

16. Other Information

The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations or mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. (Unless noted to the contrary, the technical information applies only to pure product).