

Version 1.1

Polycaprolactone: 6-Caprolactone polymer

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

1. Product Identifiers

Product name : PCL
CAS No : 24980-41-4

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

Identified uses: Laboratory chemicals, Manufacture of substances

3. Relevant Usage:

Pharmaceutical drug formulation applications

4. Details of the supplier of the safety data sheet

Company : Nomisma Healthcare Private Limited
J-63, B.I.D.C Estate, Opp. Jyoti Switch Gear Pvt. Ltd.,
Gorwa, Vadodara, Gujarat - 390 0016, India
Phone : (+91) 97731 34699
Email : info@nomismahealthcare.com

5. Emergency telephone number

Emergency phone : (+91) 97731 34699,
(+91) 97731 34279

SECTION 2: Hazards identification

1. Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2. Label Elements

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

3. Precautionary Statements

a. Prevention

Wash face, hands and any exposed skin thoroughly after handling.
Wear protective gloves / protective clothing / eye protection / face protection
Avoid breathing dust / fume / gas / mist / vapors / spray
Use only outdoors or in a well-ventilated area

b. Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor / physician if you feel unwell

c. Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

d. Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice / attention

e. Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

f. Disposal

Dispose of contents/container to an approved waste disposal plant

4. Other Hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

1. Substances

Synonyms : 6-Caprolactone polymer

Formula : $(C_6H_{10}O_2)_n$

CAS-No. : 24980-41-4

No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

1. Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.

In case of skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention.

In case of eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Fire-fighting measures

1. Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO₂) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

2. Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

4. Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, and consult an expert.

For personal protection see section 8.

2. Environmental precautions

Do not let product enter drains.

3. Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly.

Clean up affected area. Avoid generation of dusts.

4. Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

1. Precautions for safe handling

Advice on protection against fire and explosion

Provide appropriate exhaust ventilation at places where dust is formed.

Hygiene measures

General industrial hygiene practice

For precautions see section 2.2.

2. Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Storage stability

Recommended storage temperature 2 - 8 °C

Handle and store under inert gas. Hydrolyzes readily.

3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

1. Control parameters

Ingredients with workplace control parameters

2. Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

3. Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

4. Personal Protective Equipment

Appropriate technical controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and after working day.

Personal Protection

Protection of eyes / face

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

Skin protection

Handle with gloves.

Body Protection

Material Safety Data Sheet**Revision Date: 01-04-2024**

Full protective clothing against chemicals the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific place of work.

Respiratory protection

Required when dusts are generated

No protective equipment is needed under normal use conditions

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

SECTION 9: Physical and chemical properties**1. Information on basic physical and chemical properties**

Appearance	: White
Odor	: No information available
Odor threshold	: No information available
pH	: No information available
Melting point / freezing point	: 60 °C
Initial boiling point / Range	: No information available
Flash point	: No information available
Evaporation rate	: Not applicable
Flammability (solid, gas)	: No information available
Upper / lower flammability or explosive limits	: No data available
Vapor pressure	: No information available
Vapor density	: Not applicable
Specific Gravity	: No information available
Solubility	: No information available
Partition coefficient; n-octanol/water	: No data available
Autoignition temperature	: Not applicable
Decomposition temperature	: No information available
Viscosity	: No data available

2. Other information

No data available

SECTION 10: Stability and Reactivity

Chemical Stability:	Stable
Conditions to Avoid:	Moisture, excessive temps
Incompatibility with other materials:	Acids, alkalis
Hazardous Decomposition Products:	None
Hazardous Polymerization:	Will not occur

SECTION 11: Toxicological information

1. Information on toxicological effects

Principle Routes of Exposure

Eye contact. Skin contact. Inhalation. Ingestion.

Acute toxicity

No data available

Local effects

May cause eye/skin irritation. Product dust may be irritating to eyes, skin and respiratory system. Caused mild to moderate conjunctival irritation in eye irritation studies using rabbits. Caused very mild redness in dermal irritation studies using rabbits (slightly irritating). Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Long term toxicity

Did not cause skin allergic reactions in skin sensitization studies using guinea pigs.

Specific effects

May cause skin irritation and/or dermatitis. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Burning produces irritant fumes.

Mutagenic effects

Not mutagenic in AMES Test.

Reproductive toxicity

No data is available on the product itself.

Carcinogenic effects

No data is available on the product itself.

Target organ effects

There were no target organ effects noted following ingestion or dermal exposure in animal studies.

Skin corrosion / irritation

LD50/dermal/rabbit > 2000 mg/kg

Ingestion

LD50/oral/rat > 5000 mg/kg.

SECTION 12: Ecological information

1. Toxicity

No data available

2. Persistence and degradability

No data available

Material Safety Data Sheet

Revision Date: 01-04-2024

3. Bioaccumulative potential

No data available

4. Mobility in soil

No data available

5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

6. Endocrine disrupting properties

No data available

7. Other adverse effects

No data available

SECTION 13: Disposal considerations

1. Waste treatment methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport Information

1. UN number

ADR/RID: -

IMDG: -

IATA: -

2. UN proper shipping name

ADR/RID:

Not dangerous goods

IMDG:

Not dangerous goods

ATA:

Not dangerous goods

3. Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

4. Packaging group

ADR/RID: -

IMDG: -

IATA: -

5. Environmental hazards

ADR/RID: - No

IMDG Marine pollutant:- No

IATA: - No

6. Special precautions for user

Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information**1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

2. Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx – Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 – Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG – International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL – Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS – Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety

Material Safety Data Sheet**Revision Date:** 01-04-2024

Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI – Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Date of creation: 18-10-2022

Nomisma Healthcare Private Limited provides this data and information in good faith but, is not responsible for its understanding or accuracy, so it shall be used only as a guide. Individuals receiving this information must use their independent decision in determining its correctness for a particular purpose.

This document does not represent any guarantee of the properties of the product for particular purposes. Accordingly, Nomisma Healthcare Private Limited will not be responsible for damages resulting from handling or from contact with the above product.