

# Safety data sheet

Page: 1/11

Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 09.07.2025

Version: 2.0

Product: **Kollidon® CL**

(ID no. 30034964/SDS\_GEN\_MD/EN)

Date of print 14.10.2025

## 1. Identification

### Product identifier

#### **Kollidon® CL**

Chemical name: 2-pirrolidinona , 1 - ethenyl- , homopolímero

CAS Number: 9003-39-8

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

Relevant identified uses: pharmaceutical excipient

### Details of the supplier of the safety data sheet

Company:

### Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

## 2. Hazards Identification

### Classification of the substance or mixture

According to UN GHS criteria

No need for classification according to GHS criteria for this product.

## Label elements

### Globally Harmonized System, EU (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

## Other hazards

### According to UN GHS criteria

The product is under certain conditions capable of dust explosion.

---

## 3. Composition/Information on Ingredients

### Substances

#### Chemical nature

2-Pyrrolidinone, 1-ethenyl-, homopolymer  
CAS Number: 9003-39-8

crosslinked, Microgranule (MG)

### Mixtures

Not applicable

---

## 4. First-Aid Measures

### Description of first aid measures

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink 200-300 ml of water.

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

Symptoms: (Further) symptoms and / or effects are not known so far

**Indication of any immediate medical attention and special treatment needed**

Treatment: Symptomatic treatment (decontamination, vital functions).

---

**5. Fire-Fighting Measures****Extinguishing media**

Suitable extinguishing media:

water spray, foam, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:

water jet

**Special hazards arising from the substance or mixture**

hydrogen cyanide, carbon oxides, nitrogen oxides, harmful vapours

The substances/groups of substances mentioned can be released in case of fire. Dust explosion hazard.

**Advice for fire-fighters**

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

---

**6. Accidental Release Measures**

Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Avoid dispersal of dust in the air (e.g. by clearing dusty surfaces with compressed air).

**Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Information regarding personal protective measures, see section 8. Use personal protective clothing.

**Environmental precautions**

Do not discharge into drains/surface waters/groundwater.

**Methods and material for containment and cleaning up**

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Dispose of absorbed material in accordance with regulations. Avoid raising dust.

---

## 7. Handling and Storage

### Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation. Provide exhaust ventilation if dust is formed.

Protection against fire and explosion:

Avoid dust formation. The product is capable of dust explosion. Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Dust explosion class: Dust explosion class 2 (Kst-value 200 up to 300 bar m s<sup>-1</sup>).

### Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry.

### Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

---

## 8. Exposure Controls/Personal Protection

### Control parameters

#### Components with occupational exposure limits

No substance specific occupational exposure limits known.

### Exposure controls

#### Personal protective equipment

Respiratory protection:

Breathing protection if dusts are formed. Particle filter with low efficiency for solid particles (e.g. EN 143 or 149, Type P1 or FFP1)

Hand protection:

Wear chemical resistant protective gloves.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen based on level of activity and exposure.

#### General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. No eating, drinking, smoking or tobacco use at the place of work. Hands

and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

## 9. Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

State of matter:	solid	
Form:	powder	
Colour:	white to cream	
Odour:	almost odourless	
Odour threshold:		
	not determined	
melting range:	>= 130 °C	
	The substance / product decomposes.	
Boiling point:		
	not applicable	
Flammability:	not highly flammable	(VDI 2263, sheet 1, 1.1 (May 1990))
Lower explosion limit:		
	For solids not relevant for classification and labelling.	
Upper explosion limit:		
	For solids not relevant for classification and labelling.	
Flash point:		
	not applicable, the product is a solid	
Thermal decomposition:	150 °C (DSC (DIN 51007))	
pH value:	5 - 7	
	(1 %(m), 20 °C)	
	(as aqueous suspension)	
Viscosity, dynamic:		
	not applicable, the product is a solid	
Solubility in water:	insoluble	
Solubility (qualitative) solvent(s):	organic solvents	
	insoluble	
Partitioning coefficient n-octanol/water (log Kow):		
	not determined	
Vapour pressure:		
	dropped	
Density:		
	No information is available for the absolute density. Instead the bulk density was determined as a more relevant value.	
Relative vapour density (air):		
	not relevant	

### 9.2. Other information

#### Information with regard to physical hazard classes

##### Explosives

Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 09.07.2025

Version: 2.0

Product: **Kollidon® CL**

(ID no. 30034964/SDS\_GEN\_MD/EN)

Date of print 14.10.2025

Explosion hazard: Product is not explosive, however a dust explosion could result from an air / dust mixture.

Oxidizing properties

Fire promoting properties: not fire-propagating

Self-heating substances and mixtures

Self heating ability: It is a substance capable of spontaneous heating according to UN transport regulations class 4.2. Based on test results packaging < 450 l are exempted from the classification. (UN Test N.4 (self heating substances))

Substances and mixtures, which emit flammable gases in contact with water

Formation of flammable gases:

Forms no flammable gases in the presence of water.

Corrosion to metals

Corrosive effects to metal are not anticipated.

**Other safety characteristics**Bulk density: approx. 330 kg/m<sup>3</sup>

SAPT-Temperature:

Study scientifically not justified.

Evaporation rate:

The product is a non-volatile solid.

---

**10. Stability and Reactivity****Reactivity**

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: Corrosive effects to metal are not anticipated.

Formation of

Remarks:

flammable gases:

Forms no flammable gases in the presence of water.

**Chemical stability**

The product is stable if stored and handled as prescribed/indicated.

**Possibility of hazardous reactions**

Dust explosion hazard.

**Conditions to avoid**

Avoid dust formation. Avoid electro-static charge. Avoid all sources of ignition: heat, sparks, open flame. See SDS section 7 - Handling and storage.

**Incompatible materials**

Substances to avoid:  
strong alkalis

### **Hazardous decomposition products**

Hazardous decomposition products:  
No hazardous decomposition products if stored and handled as prescribed/indicated.

---

## **11. Toxicological Information**

### **Information on toxicological effects**

#### Acute toxicity

Assessment of acute toxicity:  
Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation.

Experimental/calculated data:  
LD50 rat (oral): > 2,000 mg/kg (BASF-Test)

LC50 rat (by inhalation): > 5.2 mg/l 4 h (OECD Guideline 403)

#### Irritation

Assessment of irritating effects:  
Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:  
Skin corrosion/irritation rabbit: non-irritant (Draize test)

Serious eye damage/irritation rabbit: non-irritant (Draize test)

#### Respiratory/Skin sensitization

Assessment of sensitization:  
No data available.

#### Germ cell mutagenicity

Assessment of mutagenicity:  
The substance was not mutagenic in studies with mammals.

#### Carcinogenicity

Assessment of carcinogenicity:  
In long-term animal studies in which the substance was given in high doses by feed, a carcinogenic effect was not observed.

#### Reproductive toxicity

Assessment of reproduction toxicity:  
No data available.

Developmental toxicity

Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Specific target organ toxicity (single exposure)

Remarks: No data available.

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

Assessment of repeated dose toxicity:

No data available.

Aspiration hazard

not applicable

---

## 12. Ecological Information

### Toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:

LC50 (96 h) > 10,000 mg/l, *Leuciscus idus* (DIN 38412 Part 15, static)

Microorganisms/Effect on activated sludge:

EC20 (0.5 h) &gt; 1,995 mg/l, activated sludge, industrial (OECD Guideline 209, aerobic)

### Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):

Poorly eliminated from water.

Elimination information:

< 10 % DOC reduction (15 d) (OECD Guideline 302 B) (aerobic, activated sludge, industrial) Poorly eliminated from water.

### Bioaccumulative potential

Bioaccumulation potential:

Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected.



## Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: No data available.

## Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification

## Other adverse effects

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

---

## 13. Disposal Considerations

### Waste treatment methods

Observe national and local legal requirements.

Contaminated packaging:

Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

---

## 14. Transport Information

### Land transport

ADR

UN number or ID number:	UN3088
UN proper shipping name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (1-ETHENYL-2-PYRROLIDINONE, HOMOPOLYMER)

Transport hazard class(es):	4.2
-----------------------------	-----

Packing group:	III
----------------	-----

Environmental hazards:	no
------------------------	----

Special precautions for user:	Tunnel code: E
-------------------------------	----------------

	Not dangerous goods of class 4.2 in packages up to 450 litres capacity.
--	---

RID

Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 09.07.2025

Version: 2.0

Product: **Kollidon® CL**

(ID no. 30034964/SDS\_GEN\_MD/EN)

Date of print 14.10.2025

UN number or ID number:	UN3088
UN proper shipping name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (1-ETHENYL-2-PYRROLIDINONE, HOMOPOLYMER)
Transport hazard class(es):	4.2
Packing group:	III
Environmental hazards:	no
Special precautions for user:	Not dangerous goods of class 4.2 in packages up to 450 litres capacity.

**Inland waterway transport**

ADN

UN number or ID number:	UN3088
UN proper shipping name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (1-ETHENYL-2-PYRROLIDINONE, HOMOPOLYMER)
Transport hazard class(es):	4.2
Packing group:	III
Environmental hazards:	no
Special precautions for user:	Not dangerous goods of class 4.2 in packages up to 450 litres capacity.

**Transport in inland waterway vessel**

Not evaluated

**Sea transport**

IMDG

UN number or ID number:	UN 3088
UN proper shipping name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (1-ETHENYL-2-PYRROLIDINONE, HOMOPOLYMER)
Transport hazard class(es):	4.2
Packing group:	III
Environmental hazards:	no
Special precautions for user:	Marine pollutant: NO EmS: F-A; S-J Not dangerous goods of class 4.2 in packages up to 450 litres capacity.

**Air transport**

IATA/ICAO

UN number or ID number:	UN 3088
UN proper shipping name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (1-ETHENYL-2-

---

Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 09.07.2025

Version: 2.0

Product: **Kollidon® CL**

(ID no. 30034964/SDS\_GEN\_MD/EN)

Date of print 14.10.2025

---

PYRROLIDINONE, HOMOPOLYMER)

Transport hazard class(es):	4.2
Packing group:	III
Environmental hazards:	No Mark as dangerous for the environment is needed
Special precautions for user:	Not dangerous goods of class 4.2 in packages up to 450 litres capacity.

**Maritime transport in bulk according to IMO instruments**

Maritime transport in bulk is not intended.

---

**15. Regulatory Information****Safety, health and environmental regulations/legislation specific for the substance or mixture**

Not applicable

---

**16. Other Information**

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

---

Vertical lines in the left hand margin indicate an amendment from the previous version.