We create chemistry

Safety Data Sheet
Kollidon® 90 F

1. Identification

Product identifier used on the label

Kollidon® 90 F

Recommended use of the chemical and restriction on use

Recommended use*: pharmaceutical excipient
Unsuitable for use: Not intended for sale to or use by the general public.

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Synonyms: Polyvinylpyrrolidone

2. Hazards Identification

According to Regulation 2024 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Combustible Dust Combustible Dust (1) Combustible Dust

Label elements

Signal Word:
Warning

Hazard Statement:
May form combustible dust concentration in air.

Hazards not otherwise classified

The product is under certain conditions capable of dust explosion.

3. Composition / Information on Ingredients

According to Regulation 2024 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Under the referenced regulation, this product does not contain any components classified for health hazards above the relevant cut off value.

4. First-Aid Measures

Description of first aid measures

General advice:
Remove contaminated clothing.

If inhaled:
Keep patient calm, remove to fresh air. Assist in breathing if necessary. Seek medical attention.

If on skin:
Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:
In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If irritation develops, seek medical attention.

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

Most important symptoms and effects, both acute and delayed

Symptoms: No data available.

Indication of any immediate medical attention and special treatment needed

Note to physician
Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
foam, water spray, dry powder

Special hazards arising from the substance or mixture
Hazards during fire-fighting:
harmful vapours, carbon oxides, nitrogen oxides
The substances/groups of substances mentioned can be released in case of fire. Dust explosion hazard.

Advice for fire-fighters
Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

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

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

6. Accidental release measures

Further accidental release measures:
Avoid dispersal of dust in the air (e.g. by clearing dusty surfaces with compressed air). 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.

Personal precautions, protective equipment and emergency procedures
Avoid dust formation. Use personal protective clothing. Information regarding personal protective measures, see section 8.

Wear appropriate respiratory protection. Use personal protective clothing. Ensure adequate ventilation.

Environmental precautions
Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up
For small amounts: Pick up with suitable appliance and dispose of.
For large amounts: Sweep/shovel up.
Dispose of absorbed material in accordance with regulations. Avoid raising dust.

Nonsparking tools should be used.

7. Handling and Storage

Precautions for safe handling
Avoid dust formation. Provide exhaust ventilation if dust is formed.

Protection against fire and explosion:
Avoid dust formation. 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. Routine housekeeping

should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 660 (2025) Standard for Combustible Dust and Particulate Solids. NFPA 660 is a combination of Standards NFPA 61 (Agriculture and Food), NFPA 484 (Metals), NFPA 652 (Fundamentals of Combustible Dusts), NFPA 654 (Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids), NFPA 65 (Sulfur), and NFPA 664 (Woodworking/Processing). Consult NFPA 660 standard for relevant commodity-specific and general safety information.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Containers should be stored tightly sealed in a dry place. Protect against heat.

Storage stability:
No specific storage temperature necessary.

8. Exposure Controls/Personal Protection

none

Advice on system design:
Provide local exhaust ventilation to control dusts/mists. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Respiratory protection:
Breathing protection if dusts are formed. Wear a NIOSH-certified (or equivalent) respirator as necessary.

Hand protection:
Chemical resistant protective gloves

Eye protection:
Safety glasses with side-shields. Wear safety goggles (chemical goggles) if there is potential for airborne dust exposures.

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

Physical state:	solid	
Form:	powder	
Odour:	almost odourless	
Odour threshold:	not determined	
Colour:	white to cream	
pH value:	4.0 - 7.0 (50 g/l)	(Ph. Eur. 2.2.3)
melting range:	>= 130 °C The substance / product decomposes.	
freezing range:	No data available.	
Boiling point:	The product is a non-volatile solid.	
Flash point:	not applicable	
Flammability:	not highly flammable	(other)
Lower explosion limit:	For solids not relevant for classification and labelling.	(air)
Upper explosion limit:	For solids not relevant for classification and labelling.	
Autoignition:	425 °C	(DIN 51794)
SADT:	Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.	
Vapour pressure:	not applicable	
Density:	1.2 g/cm3 (20 °C)	
Relative density:	No data available.	
Bulk density:	approx. 400 - 600 kg/m3	(DIN EN ISO 60)
Relative vapour density:	The product is a non-volatile solid.	
Partitioning coefficient n-octanol/water (log Pow):	not determined	
Self-ignition temperature:	not self-igniting	
Thermal decomposition:	170 °C (DSC (DIN 51007)) It is not a self-decompositionable substance.	
Viscosity, dynamic:	10,000 - 30,000 mPa.s (20 %(m), 23 °C)	(DIN EN ISO 2555 (RVT))
Viscosity, kinematic:	No data available.	
Solubility in water:	> 270 g/l (23 °C)	
Miscibility with water:	soluble	
Solubility (qualitative):	soluble solvent(s): organic solvents,	
Molecular weight:	No data available.	
Evaporation rate:	The product is a non-volatile solid.	

Particle characteristics

Particle size distribution:	typically > 100 µm	(D50, Volumetric Distribution, ISO 13320-1)

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.

Oxidizing properties:
not fire-propagating

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
strong alkalies

Hazardous decomposition products

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

Thermal decomposition:
170 °C (DSC (DIN 51007))
It is not a self-decompositionable substance.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

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

Oral
Type of value: LD50
Species: rat
Value: > 2,000 mg/kg (BASF-Test)

Inhalation
Type of value: LC50
Species: rat
Value: > 5.2 mg/l (OECD Guideline 403)
Exposure time: 4 h

Dermal

No data available.

Assessment other acute effects
Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Irritation / corrosion
Assessment of irritating effects: Not irritating to eyes and skin.

Skin
Species: rabbit
Result: non-irritant
Method: Draize test

Eye
Species: rabbit
Result: non-irritant
Method: Draize test

Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: None known
Experimental/calculated data: No data available.

Genetic toxicity
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: Not expected to cause reproductive toxicity (based on composition).

Teratogenicity
Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

12. Ecological Information

Toxicity

Aquatic 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

Toxicity to microorganisms
OECD Guideline 209 aerobic
activated sludge, industrial/EC20 (0.5 h): > 1,995 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H2O)
Poorly eliminated from water.

Elimination information

Information on: 2-Pyrrolidinone, 1-ethenyl-, homopolymer
< 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
No data available.

Additional information

Other ecotoxicological advice:
Ecological data are determined by analogy.

13. Disposal considerations

Waste disposal of substance:
Do not discharge into drains/surface waters/groundwater. Dispose of in accordance with national, state and local regulations.

Container disposal:
Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport
USDOT

Hazard class:	4.2
Packing group:	III
ID number:	UN 3088

Hazard label:	4.2
Proper shipping name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (contains 1-ETHENYL-2-PYRROLIDINONE, HOMOPOLYMER)

Sea transport
IMDG

Hazard class:	4.2
Packing group:	III
ID number:	UN 3088
Hazard label:	4.2
Marine pollutant:	NO
Proper shipping name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (contains 1-ETHENYL-2-PYRROLIDINONE, HOMOPOLYMER)

Air transport
IATA/ICAO

Hazard class:	4.2
Packing group:	III
ID number:	UN 3088
Hazard label:	4.2
Proper shipping name:	SELF-HEATING SOLID, ORGANIC, N.O.S. (contains 1-ETHENYL-2-PYRROLIDINONE, HOMOPOLYMER)

Further information
Not dangerous goods of class 4.2 in packages up to 3000 litres capacity.

15. Regulatory Information

Federal Regulations

Registration status:

Pharma	TSCA, US	released / exempt
Chemical	TSCA, US	released / listed
Chemical	TSCA, US	

All substances are TSCA listed and active.

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

State regulations

State RTK	CAS Number	Chemical name
PA	616-45-5	2-Pyrrolidone

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including ACETALDEHYDE, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

NFPA Hazard codes:

Health: 0 Fire: 1 Reactivity: 1 Special:

HMIS III rating
Health: 0 Flammability: 1 Physical hazard: 1

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2025/08/28

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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END OF DATA SHEET