

This safety data sheet was created pursuant to the requirements of:
UK REACH Regulations (SI 2019/758 as amended)

Supersedes date 22-Nov-2023

Revision date 24-Apr-2025

Revision Number 5

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

1.1. Product identifier

Product Code(s)	53450
Safety data sheet number	53450
Product Name	2-PYRROLIDINONE-1-ETHYNYL HOMOPOLYMER (SOLUBLE)
EC Number	618-363-4
CAS No	9003-39-8
Synonyms	KOVIDONE K15, KOVIDONE K17, KOVIDONE K25, KOVIDONE K12 PF – PVP, KOVIDONE K60, KOVIDONE K90, POVIDONE K17, KOVIDONE K17 PF, POLYVISCOL K17, KOVIDONE K12, POVIDONE K 29 32, KOVIDONE K 29 32, POVIDONE K30 PF, KOVIDONE K30 PF, KOVIDONE K30 PVP, POVIDONE K30 EP, POVIDONE K 30, POVIDONE K12 PF, KOVIDONE K12 PF
Pure substance/mixture	Substance

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

Recommended use	Pharmaceuticals Personal care Chemical intermediate Laboratory chemicals Manufacture of substance
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1.3. Details of the supplier of the safety data sheet

Supplier

Univar Solutions UK Ltd
Aquarius House
6 Mid Point Business Park
Bradford
GBR

For further information, please contact

E-mail address	SDS.EMEA@univarsolutions.com
Non-Emergency Telephone Number	+44 1274 267300 / +44 1274 267306

1.4. Emergency telephone number

Emergency Telephone	SGS - +32 (0)3 575 55 55 (24h)
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified

2.2. Label elements

Not classified

Hazard statements

Not classified

2.3. Other hazards

Dust can form an explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	Weight-%	EC No (EU Index No)	UK REACH registration number	Classification according to GB CLP (SI 2020/1567 as amended)	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
2-PYRROLIDINON E-1-ETHYNYL HOMOPOLYMER (SOLUBLE) 9003-39-8	90 - 100%	618-363-4	-	Not Classified	-	-	-

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (UK REACH Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice

Keep victim under observation.

Inhalation

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. If breathing is irregular or stopped, administer artificial respiration. Place unconscious person on the side in the recovery position and ensure breathing can take place. Get medical attention if symptoms occur.

Eye contact

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

Skin contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if symptoms occur.

Ingestion	Rinse mouth thoroughly with water. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
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4.2. Most important symptoms and effects, both acute and delayed

Eyes	Solid particles trapped behind the eyelid may cause abrasive damage,.
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4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Alcohol resistant foam. Carbon dioxide (CO ₂). powder. Water spray or fog.
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Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
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Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
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5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Thermal decomposition can lead to release of irritating and toxic gases and vapours. Dust can form an explosive mixture with air.
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Hazardous combustion products	Carbon oxides. Nitrogen oxides (NO _x).
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5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid generation of dust. In case of spills, beware of slippery floors and surfaces.
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For emergency responders	Use personal protection recommended in Section 8.
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6.2. Environmental precautions

Environmental precautions	Do not allow runoff to sewer, waterway or ground. Local authorities should be advised if significant spillages cannot be contained.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Avoid handling which leads to dust formation. Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like.
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Methods for cleaning up Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Pick up and transfer to properly labelled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with eyes, skin and clothing. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice. Avoid generation of dust. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge.

General hygiene considerations Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using the product. Take off all contaminated clothing and wash it before reuse. Wash hands and face before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Specific use(s)
See section 1 for more information.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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

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

Derived No Effect Level (DNEL) - Workers No information available

Derived No Effect Level (DNEL) - General Public No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering controls Ensure adequate ventilation. Avoid generation of dust. Respiratory protection must be used if air contamination exceeds acceptable level.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Use eye protection according to EN 166.

Hand protection Wear suitable gloves. Gloves must conform to standard EN 374.

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
Long term (repeated)	Nitrile rubber	>0.4 mm	>8 hours
Long term (repeated)	Butyl rubber	>0.7 mm	>8 hours
Long term (repeated)	Chloroprene rubber (CR)	>0.5 mm	>8 hours

Skin and body protection Wear appropriate clothing to prevent reasonably probable skin contact.

Respiratory protection Use appropriate respiratory protection.
Recommended filter type: Particulate filter P1. Particulates filter conforming to EN 143.

General hygiene considerations Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using the product. Take off all contaminated clothing and wash it before reuse. Wash hands and face before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid
Appearance Dusty powder Powder Flakes
Colour White/off-white., to, Cream., to, Yellow-white
Odour Odourless. To. Slight.
Odour threshold No information available

Property	Values	Remarks • Method
Melting point / freezing point		No information available.
Initial boiling point and boiling range		No information available.
Flammability		No information available.
Flammability Limit in Air		No information available.
Upper flammability or explosive limits		
Lower flammability or explosive limits		
Flash point	> 215 °C	Pensky-Martens closed cup.
Autoignition temperature	425 °C	
Decomposition temperature	> 130 °C	
pH	3 - 9	pH (diluted solution): 3 - 9 (10%).
pH (as aqueous solution)		No information available.
Kinematic viscosity		No information available.
Dynamic viscosity		No information available.
Water solubility	Soluble in water > 270 g/l @ 23 °C	

Solubility(ies)		No information available.
Partition coefficient	log Kow: -3.4	
Vapour pressure		No information available.
Relative density	1.2 g/cm3 @ 20°C	@ 20 °C.
Bulk density		No information available
Liquid Density	No information available	No information available
Relative vapour density		No information available.
Particle characteristics		No information available.
Particle Size	No information available	
Particle Size Distribution	No information available	
Explosive properties	No information available	
Oxidising properties	No information available	

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity None known.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Dust may form explosive mixture with air.

10.4. Conditions to avoid

Conditions to avoid Avoid generation of dust. Keep away from heat, sparks and open flame. Take precautionary measures against static discharges.

10.5. Incompatible materials

Incompatible materials Strong oxidising agents. Strong reducing agents. Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition can lead to release of irritating and toxic gases and vapours. Nitrogen oxides (NOx). Carbon oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information

Inhalation Inhalation of dust in high concentration may cause irritation of respiratory system.

Eye contact Solid particles trapped behind the eyelid may cause abrasive damage,.

Skin contact Non-irritating during normal use.

Ingestion May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2-PYRROLIDINONE-1-ETHYNYL HOMOPOLYMER (SOLUBLE)	>2000 mg/kg (Rat)	-	>5.2 mg/l (Rat)

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Based on available data the classification criteria are not met.

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	Dermal			non-irritant

Serious eye damage/eye irritation Based on available data the classification criteria are not met.

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	eye			non-irritant

Respiratory or skin sensitisation Based on available data the classification criteria are not met.

2-PYRROLIDINONE-1-ETHYNYL HOMOPOLYMER (SOLUBLE) (9003-39-8)

Method	Species	Exposure route	Results
			Non-sensitizing.

Germ cell mutagenicity Based on available data the classification criteria are not met.

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity Based on available data the classification criteria are not met.

STOT - single exposure Based on available data the classification criteria are not met.

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard Based on available data the classification criteria are not met.

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Not considered to be harmful to aquatic life.

2-PYRROLIDINONE-1-ETHYNYL HOMOPOLYMER (SOLUBLE) (9003-39-8)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
	Leuciscus idus	LC50	>10000 mg/L	96 hours	
OECD Test No. 209: Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)	activated sludge	EC20	>1995 mg/L	30 minutes	

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

12.4. Mobility in soil

Mobility in soil Soluble in water.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IATA

14.1 UN number or ID number Not regulated

14.2

14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	No
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).
This product does not contain substances subject to restriction (UK REACH - Annex XVII).

Persistent Organic Pollutants

Not applicable

Export Notification requirements

Not applicable

Named dangerous substances per COMAH Regulations 2015 (as amended)

Not applicable

The Ozone-Depleting Substances Regulations 2015

Not applicable

The Biocidal Products Regulations 2001 (as amended)

Not applicable

The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)
Not applicable

Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)
Not applicable

International Inventories

TSCA	Contact supplier for inventory compliance status
DSL/NDL	Contact supplier for inventory compliance status
EINECS/ELINCS	Contact supplier for inventory compliance status
ENCS	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECI	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AIIC - Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals

15.2. Chemical safety assessment

Chemical Safety Report A Chemical Safety Assessment is not required for this substance

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitisers		

Revision Note **SDS sections updated 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16**

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method

Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGL(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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**This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet