



SAFETY DATA SHEET

ACETIC ACID ETHENYL ESTER POLYMER WITH 1 ETHENYL - 2 - PYRROLIDINONE

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

1.1. Product identifier

Product name	ACETIC ACID ETHENYL ESTER POLYMER WITH 1 ETHENYL - 2 - PYRROLIDINONE
Product number	53451
Synonyms; trade names	KOVIDONE VA64
REACH registration notes	This product is not classified as hazardous, the information in this datasheet is given for guidance only. Substances contained in this product that are not classified as hazardous have been/will be registered for REACH at the appropriate time.
CAS number	25086-89-9

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

Identified uses	Pharmaceuticals Chemical
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 sds@univar.com
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	53451

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified

2.2. Label elements

Hazard statements	NC Not Classified
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2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria. Dust may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.1. Substances

ACETIC ACID ETHENYL ESTER POLYMER WITH 1 ETHENYL - 2 - PYRROLIDINONE

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SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Eye contact	May cause temporary eye irritation.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with the following media: Water spray. Foam.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Cyanides. Oxides of the following substances: Carbon. Nitrogen.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Follow precautions for safe handling described in this safety data sheet. Provide adequate ventilation. Avoid generation and spreading of dust.
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6.2. Environmental precautions

Environmental precautions	Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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ACETIC ACID ETHENYL ESTER POLYMER WITH 1 ETHENYL - 2 - PYRROLIDINONE

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Avoid generation and spreading of dust. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13. Flush contaminated area with plenty of water.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid handling which leads to dust formation. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Earth container and transfer equipment to eliminate sparks from static electricity. Keep away from heat, sparks and open flame.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Ingredient comments No exposure limits known for ingredient(s).

8.2. Exposure controls

Protective equipment



Appropriate engineering controls Provide adequate ventilation.

Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 8 hours. To protect hands from chemicals, gloves should comply with European Standard EN374. Nitrile rubber. glove thickness 0.4mm Chloroprene rubber. glove thickness 0.5mm Butyl rubber. glove thickness 0.7mm To protect hands from chemicals, gloves should comply with European Standard EN374.

Hygiene measures Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

Respiratory protection Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m³. Wear a respirator fitted with the following cartridge: Particulate filter, type P2. EN 136/140/141/145/143/149

ACETIC ACID ETHENYL ESTER POLYMER WITH 1 ETHENYL - 2 - PYRROLIDINONE

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Dusty powder. Solid Granules. Crystalline powder.
Colour	White. to Cream.
Odour	Slight.
Odour threshold	No information available.
pH	pH (diluted solution): 3 - 7 (100g/l) @ 20°C
Melting point	140°C
Initial boiling point and range	No information available.
Flash point	215°C
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 50 g/m ³
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	No information available.
Bulk density	100 - 300 kg/m ³
Solubility(ies)	Soluble in water. Soluble in the following materials: Organic solvents.
Partition coefficient	log Kow: <-2.5
Auto-ignition temperature	~420°C
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.

9.2. Other information

Other information	Not available.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.

ACETIC ACID ETHENYL ESTER POLYMER WITH 1 ETHENYL - 2 - PYRROLIDINONE

Critical temperature No information available.

Volatile organic compound No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

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 excessive heat for prolonged periods of time. Static electricity and formation of sparks must be prevented.

10.5. Incompatible materials

Materials to avoid Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Cyanides. Oxides of the following substances: Carbon. Nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Skin corrosion/irritation

Animal data Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity No specific test data are available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

ACETIC ACID ETHENYL ESTER POLYMER WITH 1 ETHENYL - 2 - PYRROLIDINONE

Aspiration hazard	No information available.
Inhalation	Dust in high concentrations may irritate the respiratory system.
Ingestion	No harmful effects expected from quantities likely to be ingested by accident.
Skin contact	Skin irritation should not occur when used as recommended.
Eye contact	Particles in the eyes may cause irritation and smarting.

SECTION 12: Ecological Information

Ecotoxicity	The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.
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12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: >10000 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: >100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: >100 mg/l, Algae

12.2. Persistence and degradability

Persistence and degradability	The product is not expected to be biodegradable.
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Biodegradation	- Degradation ~20 - 30%: 15 days OECD 302B
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12.3. Bioaccumulative potential

Bioaccumulative potential	The product is not bioaccumulating.
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Partition coefficient	log Kow: <-2.5
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12.4. Mobility in soil

Mobility	The product is soluble in water.
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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
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12.6. Other adverse effects

Other adverse effects	Not determined.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Waste should be treated as controlled waste.
Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
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14.1. UN number

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Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU legislation**

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

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11/01/2018

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2.001

Supersedes date

21/06/2017

SDS number

53451

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SDS status

Approved.

Signature

Jitendra Panchal