

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : Universal Series
 Product code : 25127, 25128, 25129, 25130, 25131

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Polymeric US
 117 E. 14th Ave
 North Kansas City, MO 64116
 800-746-5567

1.4. Emergency telephone number

Emergency number Chemtel - U.S., Canada, Puerto Rico, U.S. Virgin Islands 1-800-255-3924; International 813-248-0585

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute toxicity (dermal), Category 4	H312	Harmful in contact with skin.
Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.
Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.
Carcinogenicity, Category 2	H351	Suspected of causing cancer.
Reproductive toxicity, Category 2	H361	Suspected of damaging fertility or the unborn child.
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401	Toxic to aquatic life
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H312 - Harmful in contact with skin.
 H315 - Causes skin irritation.
 H317 - May cause an allergic skin reaction.
 H318 - Causes serious eye damage.
 H335 - May cause respiratory irritation.
 H351 - Suspected of causing cancer.

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	H361 - Suspected of damaging fertility or the unborn child. H373 - May cause damage to organs through prolonged or repeated exposure. H401 - Toxic to aquatic life H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (GHS US)	: P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash hands, forearms and face thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P272 - Contaminated work clothing must not be allowed out of the workplace P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 - If on skin: Wash with plenty of water/... P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 - If exposed or concerned: Get medical advice/attention. P310 - Immediately call a poison center/doctor/... P312 - Call a poison center/doctor/... if you feel unwell P314 - Get medical advice/attention if you feel unwell. P321 - Specific treatment (see supplemental first aid instruction on this label) P322 - Specific treatment (see ... on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P363 - Wash contaminated clothing before reuse. P391 - Collect spillage. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
1-ethenyl-2-pyrrolidone*	(CAS-No.) Trade Secret	15 - 30	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Eye Dam. 1, H318 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373 Aquatic Acute 3, H402
2-propenoic acid*	(CAS-No.) Trade Secret	15 - 30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
1,3-propanediol* (Note D)	(CAS-No.) Trade Secret	15 - 30	Acute Tox. 3 (Dermal), H311 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
2-propenoic acid*	(CAS-No.) Trade Secret	>= 11.7612	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
4-methoxyphenol	(CAS-No.) 150-76-5	0.5 - 5	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 2, H401

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Note D : Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Do not get in eyes, on skin, or on clothing.
- Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2-propenoic acid		
Not applicable		
2-propenoic acid		
Not applicable		
1-ethenyl-2-pyrrolidone		
ACGIH	Local name	N-Vinyl-2-pyrrolidone
ACGIH	ACGIH TWA (ppm)	0.05 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: Liver dam. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
ACGIH	Regulatory reference	ACGIH 2018
1,3-propanediol		
Not applicable		
4-methoxyphenol (150-76-5)		
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³

8.2. Appropriate engineering controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
: No data available
: No data available
- Odour threshold : No data available

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pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Harmful in contact with skin.
Acute toxicity (inhalation)	: Not classified

ATE US (dermal)	1161.821 mg/kg bodyweight
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2-propenoic acid	
LD50 oral rat	4350 mg/kg bodyweight (Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 3000 mg/kg bodyweight (Rabbit, Male, Experimental value, Skin, 14 day(s))
ATE US (oral)	4350 mg/kg bodyweight

1-ethenyl-2-pyrrolidone	
LD50 oral rat	1022 mg/kg 834-1314,Rat; Equivalent or similar to OECD 401; Experimental value
LD50 dermal rat	1043 mg/kg rat
LD50 dermal rabbit	> 400 mg/kg (BASF test, 24 h, Rabbit, Male / female, Experimental value, Dermal)
LC50 inhalation rat (mg/l)	3.07 mg/l (BASF test, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))

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1-ethenyl-2-pyrrolidone	
ATE US (oral)	1022 mg/kg bodyweight
ATE US (dermal)	1043 mg/kg bodyweight
ATE US (vapours)	3.07 mg/l/4h
ATE US (dust,mist)	3.07 mg/l/4h

1,3-propanediol	
LD50 oral rat	5450 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	297 mg/kg (Rabbit, Literature study, Dermal)
ATE US (oral)	5450 mg/kg bodyweight
ATE US (dermal)	297 mg/kg bodyweight

4-methoxyphenol (150-76-5)	
LD50 oral rat	1600 mg/kg (Rat, Oral)
ATE US (oral)	1600 mg/kg bodyweight

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

1-ethenyl-2-pyrrolidone	
IARC group	3 - Not classifiable

Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: May cause respiratory irritation.

2-propenoic acid	
STOT-single exposure	May cause respiratory irritation.

2-propenoic acid	
STOT-single exposure	May cause respiratory irritation.

1-ethenyl-2-pyrrolidone	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
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1-ethenyl-2-pyrrolidone	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Toxic to aquatic life with long lasting effects. Toxic to aquatic life.
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2-propenoic acid	
LC50 fish 1	0.704 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
ErC50 (algae)	1.98 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

1-ethenyl-2-pyrrolidone	
LC50 fish 1	976 mg/l (OECD 203: Fish, Acute Toxicity Test, 72 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value)

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1-ethenyl-2-pyrrolidone	
EC50 Daphnia 1	45 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia sp., Static system, Fresh water, Experimental value)
ErC50 (algae)	> 1000 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value)

4-methoxyphenol (150-76-5)	
LC50 fish 1	28.5 mg/l (96 h, Salmo gairdneri, Flow-through system)
EC50 Daphnia 1	2.2 mg/l (48 h, Daphnia magna)

12.2. Persistence and degradability

2-propenoic acid	
Persistence and degradability	Not readily biodegradable in water.

2-propenoic acid	
Persistence and degradability	Biodegradability in water: no data available.

1-ethenyl-2-pyrrolidone	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	< 0.002 g O ₂ /g substance
Chemical oxygen demand (COD)	1.894 g O ₂ /g substance

1,3-propanediol	
Persistence and degradability	Biodegradability in water: no data available.

4-methoxyphenol (150-76-5)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
BOD (% of ThOD)	0.57

12.3. Bioaccumulative potential

2-propenoic acid	
BCF fish 1	37 (OECD 305: Bioconcentration: Flow-Through Fish Test, 56 h, Danio rerio, Flow-through system, Fresh water, Read-across, GLP)
Log Pow	4.52 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).

2-propenoic acid	
Bioaccumulative potential	No bioaccumulation data available.

1-ethenyl-2-pyrrolidone	
Log Pow	0.4 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

1,3-propanediol	
Bioaccumulative potential	No bioaccumulation data available.

4-methoxyphenol (150-76-5)	
Log Pow	1.34 - 1.58 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

2-propenoic acid	
Ecology - soil	No (test)data on mobility of the substance available.

1-ethenyl-2-pyrrolidone	
Log Koc	1.099 - 1.1497 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

1,3-propanediol	
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

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Universal Series	
2-propenoic acid	
2-propenoic acid	
1-ethenyl-2-pyrrolidone	
1,3-propanediol	
4-methoxyphenol (150-76-5)	

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

2-propenoic acid
Listed on the United States TSCA (Toxic Substances Control Act) inventory
2-propenoic acid
Listed on the United States TSCA (Toxic Substances Control Act) inventory
1-ethenyl-2-pyrrolidone
Listed on the United States TSCA (Toxic Substances Control Act) inventory
1,3-propanediol
Listed on the United States TSCA (Toxic Substances Control Act) inventory
4-methoxyphenol (150-76-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

No additional information available

15.3. US State regulations

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Component	State or local regulations
1-ethenyl-2-pyrrolidone()	U.S. - New Jersey - Right to Know Hazardous Substance List
4-methoxyphenol(150-76-5)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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Full text of H-statements:

H227	Combustible liquid
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

SDS US - Polymeric US

Polymeric US urges the customer receiving this safety data sheet to study it carefully to become aware of the hazards, if any, in the product. In the interest of safety, the customer should (1) notify your employees, agents and contractors of the information included in this SDS and (2) furnish a copy to each of your employees, customers and agents.

Polymeric US makes no warranty, express or implied, as to the accuracy or reliability of information contained herein, except that such information is, to the best of Polymeric US's knowledge and belief, accurate as of the date indicated on this document. Final determination of suitability of material is the sole responsibility of the user. All the materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.