

N3D-CAST373

1. PRODUCT AND COMPANY IDENTIFICATION**Company**

Arkema Inc.
900 First Avenue
King of Prussia, Pennsylvania 19406

Sartomer

Customer Service Telephone Number: (800) SARTOMER
(Monday through Friday, 8:00 AM to 5:00 PM EST)

Emergency Information

Transportation: CHEMTREC: (800) 424-9300
(24 hrs., 7 days a week)

Medical: Rocky Mountain Poison Center: (866) 767-5089
(24 hrs., 7 days a week)

Product Information

Product name: N3D-CAST373
Synonyms: N3XTDIMENSION® N3D-CAST373
Molecular formula: Proprietary Mixture
Chemical family: acrylic
Product use: 3D printing

SECTION 2: HAZARDS IDENTIFICATION**Emergency Overview**

Color: red
Physical state: liquid
Odor: acrylic-like

***Classification of the substance or mixture:**

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)
Skin irritation, Category 2, H315
Skin sensitisation, Category 1, H317
Acute aquatic toxicity, Category 1, H400
Chronic aquatic toxicity, Category 2, H411

*For the full text of the H-Statements mentioned in this Section, see Section 16.

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GHS-Labeling

Hazard pictograms:



Signal word:

Warning**Hazard statements:**

- H315 : Causes skin irritation.
- H317 : May cause an allergic skin reaction.
- H400 : Very toxic to aquatic life.
- H411 : Toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements:

Processing may release vapors and/or fumes which cause eye, skin and respiratory tract irritation.

Precautionary statements:**Prevention:**

- P261 : Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
- P264 : Wash skin thoroughly after handling.
- P272 : Contaminated work clothing should not be allowed out of the workplace.
- P273 : Avoid release to the environment.
- P280 : Wear protective gloves.

Response:

- P302 + P352 : IF ON SKIN: Wash with plenty of soap and water.
- P333 + P313 : If skin irritation or rash occurs: Get medical advice/ attention.
- P362 : Take off contaminated clothing and wash before reuse.
- P391 : Collect spillage.

Disposal:

- P501 : Dispose of contents or container to an approved waste disposal plant.

Supplemental information:**Potential Health Effects:**

Possible cross sensitization with other acrylates and methacrylates. Effects due to processing releases or residual monomer: Irritating to eyes, respiratory system and skin.

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Prolonged or repeated exposure may cause: headache, drowsiness, nausea, weakness, (severity of effects depends on extent of exposure).

Other:

Product not completely tested. Take maximum precautions when handling. This product may release fume and/or vapor of variable composition depending on processing time and temperature.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No.	Wt/Wt	GHS Classification**
Methacrylate ester	Proprietary*	>= 30 - < 60 %	H413
Acrylate ester	Proprietary*	>= 10 - < 30 %	H317, H400, H410
Acrylate monomer	Proprietary*	>= 10 - < 30 %	H315, H317, H411
Urethane oligomer	Proprietary*	>= 5 - < 10 %	H317, H411
Proprietary Material	Proprietary*	>= 1 - < 5 %	Not classified
Proprietary additive	Proprietary*	>= 1 - < 5 %	H317, H413
2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester	15625-89-5	>= 0.1 - < 1 %	H315, H319, H317, H351, H400, H410

*The specific chemical identity is withheld because it is trade secret information of Arkema Inc.

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**For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES**4.1. Description of necessary first-aid measures:****Inhalation:**

If inhaled, remove victim to fresh air.

Skin:

In case of contact, immediately flush skin with soap and plenty of water. Get medical attention. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes:

Immediately flush eye(s) with plenty of water.

Ingestion:

If swallowed, DO NOT induce vomiting. Get medical attention. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms/effects, acute and delayed:

For most important symptoms and effects (acute and delayed), see Section 2 (Hazard Statements and Supplemental Information if applicable) and Section 11 (Toxicology Information) of this SDS.

4.3. Indication of any immediate medical attention and special treatment needed:

Unless otherwise noted in Notes to Physician, no specific treatment noted; treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES**Extinguishing media (suitable):**

Water spray, Carbon dioxide (CO₂), Foam, Dry chemical

Protective equipment:

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand / NIOSH approved or equivalent).

Further firefighting advice:

Fight fire from a protected location.

Cool closed containers exposed to fire with water spray.

Closed containers of this material may explode when subjected to heat from surrounding fire.

Do not allow run-off from fire fighting to enter drains or water courses.

Fire fighting equipment should be thoroughly decontaminated after use.

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Fire and explosion hazards:

When burned, the following hazardous products of combustion can occur:

Carbon oxides

Hazardous organic compounds

Phosphorus oxides

Polymerization is exothermic and can degenerate into an uncontrolled reaction.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, Emergency procedures, Methods and materials for containment/clean-up:**

Prevent further leakage or spillage if you can do so without risk. Ventilate the area. Avoid generation of vapors. Contain and collect spillage with non-combustible absorbent material such as clean sand, earth, diatomaceous earth or non-acidic clay and place into suitable properly labeled containers for prompt disposal. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Protective equipment:

Appropriate personal protective equipment is set forth in Section 8.

SECTION 7: HANDLING AND STORAGE**Handling****General information on handling:**

Avoid breathing vapor or mist.

Avoid contact with skin, eyes and clothing.

Wash thoroughly after handling.

Emptied container retains vapor and product residue.

Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

Storage**General information on storage conditions:**

Keep in a dry, cool place. Store in closed containers, in a secure area to prevent container damage and subsequent spillage. Store out of direct sunlight in a cool well-ventilated place. Keep stabilizer levels constant to avoid explosive polymerization. An air space is required above the liquid in all containers; avoid storage under an oxygen-free atmosphere.

Storage stability – Remarks:

Inhibitor levels should be maintained. The typical shelf-life for this product is 6 months.

Storage incompatibility – General:

Store separate from:

Strong oxidizing agents

Strong reducing agents

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Free radical generators
Inert gas
Oxygen scavenger.
Peroxides

Temperature tolerance – Do not store below:
32 °F (0 °C)

Temperature tolerance – Do not store above:
100 °F (38 °C)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Guidelines:**2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (15625-89-5)**

US. OARS. WEELs Workplace Environmental Exposure Level Guide, as amended

Time weighted average	1 mg/m ³
Remarks:	Avoid skin or eye contact with liquids or aerosols.
Remarks:	Listed
Skin designation	
Remarks:	Can be absorbed through the skin.

Only those components with exposure limits are printed in this section. Limits with skin contact designation above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required. Limits with a sensitizer designation above mean that exposure to this material may cause allergic reactions.

Engineering controls:

Investigate engineering techniques to reduce exposures below airborne exposure limits or to otherwise reduce exposures. Provide ventilation if necessary to minimize exposures or to control exposure levels to below airborne exposure limits (if applicable see above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Respiratory protection:

Avoid breathing vapor or mist. Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. Consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure or where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or

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positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Skin protection:

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Avoid natural rubber gloves. Wear chemical goggles, a face shield, and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse immediately if skin is contaminated. Remove contaminated clothing immediately and wash before reuse. Clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash thoroughly after handling.

Eye protection:

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment immediately available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
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Color:	red
Physical state:	liquid
Odor:	acrylic-like
Odor threshold:	No data available.
Flash point	No data available
Auto-ignition temperature:	No data available.
Lower flammable limit (LFL):	No data available.
Upper flammable limit (UFL):	No data available.
pH:	No data available.
Density:	No data available.
Specific Gravity (Relative density):	No data available
Vapor pressure:	No data available.
Vapor density:	No data available.
Boiling point/boiling range:	No data available.
Melting point/range:	No data available.

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Freezing point:	No data available.
Evaporation rate:	No data available.
Solubility in water:	No data available.
Viscosity, dynamic:	120 CPS 77 °F (25 °C)
Oil/water partition coefficient:	No data available.
Thermal decomposition:	No data available.
Flammability:	See GHS Classification in Section 2 if applicable

SECTION 10: STABILITY AND REACTIVITY**Stability:**

This material is chemically stable under normal and anticipated storage, handling and processing conditions. However, this material can undergo hazardous polymerization.

Hazardous reactions:

Hazardous polymerisation may occur.
Polymerization is exothermic and can degenerate into an uncontrolled reaction.

Materials to avoid:

Strong reducing agents
Free radical generators
Inert gas
Oxygen scavenger.
Peroxides
Strong oxidizing agents

Conditions / hazards to avoid:

This material polymerizes exothermically in the presence of heat, contamination, oxygen free atmosphere, free radicals, peroxides and inhibitor depletion liberating heat. Avoid direct sunlight. Do NOT expose to ultraviolet light.

Hazardous decomposition products:

Thermal decomposition giving flammable and toxic products :
Carbon oxides
Acrylates
Methacrylates
Phosphorus oxides
Hazardous organic compounds

SECTION 11: TOXICOLOGICAL INFORMATION

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Data on this material and/or its components are summarized below.

Data for Methacrylate ester (Proprietary)**Acute toxicity****Oral:**

No deaths occurred. (rat) LD0 > 2,000 mg/kg.

Dermal:

No deaths occurred. (rat) LD0 > 2,000 mg/kg.

Skin Irritation:

Not irritating. (In vitro) EPISKIN Human Skin Model Test

Eye Irritation:

Causes mild eye irritation. (In vitro) Bovine corneal opacity and permeability assay (BCOP)

Skin Sensitization:

Not a sensitizer. LLNA: Local Lymph Node Assay. (mouse) No skin allergy was observed.

Repeated dose toxicity

Repeated oral administration to rat / No adverse systemic effects reported.

Genotoxicity**Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria, animal cells

Developmental toxicity

Exposure during pregnancy. Oral (rat) / No birth defects were observed.

Reproductive effects

Reproductive/Developmental Effects Screening Assay. Oral (rat) / No toxicity to reproduction.

Other information

The information presented is from representative materials in this chemical class. The results may vary depending on the test substance.

Effects due to processing releases or residual monomer:

Possible cross sensitization with other acrylates and methacrylates.

Human experience**Skin contact:**

Skin: Allergic reactions. Sensitization described in isolated cases.

Data for Acrylate ester (Proprietary)**Acute toxicity****Oral:**

No deaths occurred. (rat) LD0 > 2,000 mg/kg.

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Dermal:

No deaths occurred. (rat) LD0 > 2,000 mg/kg.

Skin Irritation:

Not irritating. (In vitro) EPISKIN Human Skin Model Test

Eye Irritation:

Not irritating. (rabbit)

Skin Sensitization:

May cause an allergic skin reaction. LLNA: Local Lymph Node Assay. (mouse) Skin allergy was observed.

Repeated dose toxicity

Repeated oral administration to rat / No adverse systemic effects reported.

Genotoxicity**Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria, animal cells

Reproductive effects

Reproductive/Developmental Effects Screening Assay. Oral (rat) / No toxicity to reproduction.

Data for Acrylate monomer (Proprietary)**Acute toxicity****Oral:**

May be harmful if swallowed. (rat) LD50 > 2,000 mg/kg.

Dermal:

No deaths occurred. (rat) LD0 > 2,000 mg/kg.

Skin Irritation:

Causes skin irritation. (rabbit) (4 h)

Eye Irritation:

Causes mild eye irritation. (rabbit)

Skin Sensitization:

May cause an allergic skin reaction. LLNA: Local Lymph Node Assay. (mouse) Skin allergy was observed.

Repeated dose toxicity

Repeated oral administration to rat / affected organ(s): Gastro-intestinal tract, Stomach / signs: At high dose :, Local irritation / No adverse systemic effects reported.

Genotoxicity**Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria, animal cells

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Genotoxicity**Assessment in Vivo:**

No genetic changes were observed in a laboratory test using: mice

Developmental toxicity

Reproductive/Developmental Effects Screening Assay. Oral (rat) / No birth defects were observed.

Reproductive effects

Reproductive/Developmental Effects Screening Assay. Oral (rat) / No toxicity to reproduction.

Other information

Possible cross sensitization with other acrylates and methacrylates.

Data for Urethane oligomer (Proprietary)**Acute toxicity****Oral:**

Practically nontoxic. (rat) LD50 > 5,000 mg/kg.

Dermal:

No deaths occurred. (rabbit) LD0 > 2,000 mg/kg.

Skin Irritation:

Not irritating. (rabbit) (4 h) (occluded exposure)

Eye Irritation:

Not irritating. (rabbit)

Skin Sensitization:

May cause allergic skin reaction. LLNA: Local Lymph Node Assay. (mouse) Skin allergy was observed.

Repeated dose toxicity

Subchronic oral administration to rat / affected organ(s): liver / signs: changes in organ weights

Genotoxicity**Assessment in Vitro:**

No genetic changes were observed in a laboratory test using: bacteria, animal cells

Reproductive effects

Reproductive/Developmental Effects Screening Assay. Oral (rat) / No toxicity to reproduction.

Data for Proprietary Material (Proprietary)**Acute toxicity****Oral:**

No deaths occurred. (rat) LD0 = 2,000 mg/kg.

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Dermal:

Practically nontoxic. (rabbit) LD50 = 5,000 mg/kg.

Inhalation:

No deaths occurred. (rat) 4 h LC0 = 1.721 mg/l. (dust/mist)

Skin Irritation:

Not irritating. (rabbit) (4 h) (occluded exposure)

Eye Irritation:

Not irritating. (rabbit)

Skin Sensitization:

Not a sensitizer. Repeated skin exposure. (guinea pig) No skin allergy was observed.

Repeated dose toxicity

Repeated oral administration to rat / No adverse systemic effects reported.

Genotoxicity**Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria, animal cells

Developmental toxicity

Reproductive/Developmental Effects Screening Assay. Oral (rat) / No birth defects were observed.

Reproductive effects

Reproductive/Developmental Effects Screening Assay. Oral (rat) / No toxicity to reproduction.

Data for Proprietary additive (Proprietary)**Acute toxicity****Oral:**

No deaths occurred. (rat) LD0 = 2,000 mg/kg.

Dermal:

No deaths occurred. (rat) LD0 = 2,000 mg/kg.

Skin Irritation:

Not irritating. (rabbit) (4 h)

Eye Irritation:

Causes mild eye irritation. (rabbit)

Skin Sensitization:

May cause allergic skin reaction. Guinea pig maximization test. Skin allergy was observed. (Strong sensitizer)

Repeated dose toxicity

Repeated oral administration to rat / No adverse systemic effects reported.

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Subchronic oral administration to rat / No adverse systemic effects reported.

Genotoxicity**Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria, animal cells, human cells

Developmental toxicity

Exposure during pregnancy. Oral (rat) / No birth defects were observed.

Data for 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (15625-89-5)**Acute toxicity****Oral:**

May be harmful if swallowed. (rat) LD50 = 3,680 mg/kg.

Dermal:

Practically nontoxic. (rabbit) LD50 = 5,170 mg/kg.

May be harmful in contact with skin. (rat) LD50 > 2,000 mg/kg.

Inhalation:

No deaths occurred. (rat) 6 h LC0 > 0.55 mg/l. (vapor)

Skin Irritation:

Causes skin irritation. (rabbit) (4 h) (Repeated skin exposure)

Eye Irritation:

Causes serious eye irritation. (rabbit)

Skin Sensitization:

May cause an allergic skin reaction. Guinea pig maximization test. Skin allergy was observed. (Strong sensitizer)

Not a sensitizer. Mouse ear swelling assay. No skin allergy was observed.

Repeated dose toxicity

Repeated dermal administration to rabbit / affected organ(s): Skin / signs: Local irritation / No adverse systemic effects reported.

Subchronic dietary administration to rat / affected organ(s): Stomach / signs: Local irritation / No adverse systemic effects reported.

Repeated oral administration to rat / affected organ(s): Stomach / signs: Local irritation / No adverse systemic effects reported.

Carcinogenicity

Chronic dermal administration to mouse / affected organ(s): liver, uterus / Increase in tumor incidence was reported.

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Classified by the International Agency for Research on Cancer as: Group 2B: Possibly carcinogenic to humans.

Genotoxicity**Assessment in Vitro:**

Both positive and negative responses for genetic changes were observed in laboratory tests using: bacteria, animal cells

Genetic changes were observed in a laboratory test using: human cells

Genotoxicity**Assessment in Vivo:**

No genetic changes were observed in a laboratory test using: mice

Developmental toxicity

Exposure during pregnancy. Oral (rabbit) / No birth defects were observed.

Exposure during pregnancy. Oral (rat) / No birth defects were observed. (at doses that produce effects in mothers)

Reproductive effects

Reproductive/Developmental Effects Screening Assay. Oral (rat) / No toxicity to reproduction.

Other information

Possible cross sensitization with other acrylates and methacrylates.

Human experience**Skin contact:**

Skin: Skin allergy was observed. Sensitization described in isolated cases. (based on reports of occupational exposure to workers)

SECTION 12: ECOLOGICAL INFORMATION**Chemical Fate and Pathway**

Data on this material and/or its components are summarized below.

Data for Methacrylate ester (Proprietary)**Biodegradation:**

Not readily biodegradable. (28 d) biodegradation 43 %

Octanol Water Partition Coefficient:

log Pow: = 3.43 - 5.62

Data for Acrylate ester (Proprietary)**Biodegradation:**

Not readily biodegradable. (28 d) biodegradation 78.8 % / The 10 day time window criterion is not fulfilled.

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Octanol Water Partition Coefficient:
log Pow: = 5, at 131 °F (55 °C) pH = 7.4

Data for Acrylate monomer (Proprietary)

Biodegradation:
Not readily biodegradable. (28 d) biodegradation 28 %

Octanol Water Partition Coefficient:
log Pow: = 1.9, at 73 °F (23 °C) pH = 6

Data for Urethane oligomer (Proprietary)

Biodegradation:
Not readily biodegradable. (28 d) biodegradation 22 %

Octanol Water Partition Coefficient:
log Pow: = 3.39, at 68 °F (20 °C)

Data for Proprietary Material (Proprietary)

Biodegradation:
Readily biodegradable. (29 d) biodegradation 76 %

Octanol Water Partition Coefficient:
log Pow: = 0.25

Data for Proprietary additive (Proprietary)

Biodegradation:
Not readily biodegradable. (29 d) biodegradation 1 %

Bioaccumulation:
28 d BCF < 5 (Cyprinus carpio (Carp))

Octanol Water Partition Coefficient:
log Pow: = 5.8, at 72 °F (22 °C) pH = 8.3

Data for 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (15625-89-5)

Biodegradation:
Readily biodegradable. (28 d) biodegradation 86 %

Octanol Water Partition Coefficient:
log Pow: = 4.35, at 68 °F (20 °C) (Method: calculated)

Ecotoxicology

Data on this material and/or its components are summarized below.

Data for Methacrylate ester (Proprietary)**Aquatic toxicity data:**

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No effect up to the limit of solubility. Danio rerio (zebra fish) 96 h LL50 > 100 mg/l (Water accommodated fraction was tested.)

Aquatic invertebrates:

No effect up to the limit of solubility. Daphnia magna (Water flea) 48 h EL50 > 100 mg/l (Water accommodated fraction was tested.)

Algae:

No effect up to the limit of solubility. Pseudokirchneriella subcapitata (green algae) 72 h EL50 > 100 mg/l (Water accommodated fraction was tested.)

Microorganisms:

Respiration inhibition / Activated sludge 28 d NOEC = 14.3 mg/l

Data for Acrylate ester (Proprietary)**Aquatic toxicity data:**

Very toxic. Danio rerio (zebra fish) 96 h LC50 = 0.149 mg/l

Aquatic invertebrates:

Very toxic. Daphnia magna (Water flea) 48 h EC50 = 0.3084 mg/l

Algae:

Very toxic. Pseudokirchneriella subcapitata (green algae) 72 h ErC50 = 0.05 mg/l

Microorganisms:

Respiration inhibition / Activated sludge 28 d NOEC > 100 mg/l

Chronic toxicity to aquatic plants:

Very toxic. Pseudokirchneriella subcapitata (green algae) 72 h ErC10 = 0.0262 mg/l

Data for Acrylate monomer (Proprietary)**Aquatic toxicity data:**

Toxic. Oncorhynchus mykiss (rainbow trout) 96 h LC50 = 4 mg/l

Aquatic invertebrates:

Harmful. Daphnia magna (Water flea) 48 h EC50 = 20 mg/l

Algae:

Harmful. Desmodesmus subspicatus (green algae) 72 h ErC50 = 34 mg/l

Microorganisms:

Respiration inhibition / Activated sludge 3 h EC50 > 1,000 mg/l

Chronic toxicity to aquatic plants:

Practically nontoxic. Desmodesmus subspicatus (green algae) 72 h NOEC r = 9 mg/l

Data for Urethane oligomer (Proprietary)**Aquatic toxicity data:**

Harmful. Danio rerio (zebra fish) 96 h LC50 = 10.1 mg/l

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Aquatic invertebrates:

No effect up to the limit of solubility. *Daphnia magna* (Water flea) 48 h EC50 > 1.2 mg/l

Algae:

No effect up to the limit of solubility. *Desmodesmus subspicatus* (green algae) 72 h EC50 > 0.68 mg/l

Chronic toxicity to aquatic plants:

Toxic. *Desmodesmus subspicatus* (green algae) 72 h NOEC r = 0.21 mg/l

Data for Proprietary Material (Proprietary)**Aquatic toxicity data:**

Practically nontoxic. *Oryzias latipes* (medaka) 96 h LC50 > 100 mg/l

Aquatic invertebrates:

Practically nontoxic. *Daphnia magna* (Water flea) 48 h EC50 = 380 mg/l

Algae:

Practically nontoxic. *Raphidocelis subcapitata* (freshwater green algae) 72 h ErC50 > 940 mg/l

Microorganisms:

Respiration inhibition / *Pseudomonas putida* 18 h NOEC > 1,088 mg/l (Nominal concentration)

Chronic toxicity to aquatic invertebrates:

Practically nontoxic. Reproduction Test / *Daphnia magna* (Water flea) 21 d NOEC > 94 mg/l

Chronic toxicity to aquatic plants:

Practically nontoxic. *Raphidocelis subcapitata* (freshwater green algae) 72 h NOEC r = 468 mg/l

Data for Proprietary additive (Proprietary)**Aquatic toxicity data:**

No effect up to the limit of solubility. *Danio rerio* (zebra fish) 96 h LC50 > 0.09 mg/l

Aquatic invertebrates:

No effect up to the limit of solubility. *Daphnia magna* (Water flea) 48 h EC50 > 1.175 mg/l

Algae:

No effect up to the limit of solubility. *Desmodesmus subspicatus* (green algae) 72 h ErC50 > 0.260 mg/l

Microorganisms:

Respiration inhibition / Activated sludge 3 h EC50 > 100 mg/l

Chronic toxicity to aquatic invertebrates:

No effect up to the limit of solubility. Reproduction Test / *Daphnia magna* (Water flea) 21 d NOEC > 0.008 mg/l

Chronic toxicity to aquatic plants:

No effect up to the limit of solubility. *Desmodesmus subspicatus* (green algae) 72 h NOEC r > 0.260 mg/l

Data for 2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester (15625-89-5)

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Aquatic toxicity data:

Very toxic. Danio rerio (zebra fish) 96 h LC50 = 0.87 mg/l

Aquatic invertebrates:

Harmful. Daphnia magna (Water flea) 48 h EC50 = 19.9 mg/l

Algae:

Toxic. Desmodesmus subspicatus (green algae) 96 h ErC50 = 4.86 mg/l

Microorganisms:

Respiration inhibition / Activated sludge 30 min EC20 = 625 mg/l

Chronic toxicity to aquatic plants:

Practically nontoxic. Desmodesmus subspicatus (green algae) 72 h ErC10 = 1.9 mg/l

SECTION 13: DISPOSAL CONSIDERATIONS**Waste disposal:**

Disposal via incineration is recommended. Dispose of in accordance with federal, state and local regulations. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

Take appropriate measures to prevent release to the environment.

SECTION 14: TRANSPORT INFORMATION**US Department of Transportation (DOT)**

UN Number : 3082
Proper shipping name : Environmentally hazardous substance, liquid, n.o.s.
Technical name : (Acrylate ester, Acrylate monomer)
Class : 9
Packaging group : III
Marine pollutant : yes

International Maritime Dangerous Goods Code (IMDG)

UN Number : 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical name : (ACRYLATE ESTER, ACRYLATE MONOMER)
Class : 9
Packaging group : III
Marine pollutant : yes

SECTION 15: REGULATORY INFORMATION

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Chemical Inventory Status

US. Toxic Substances Control Act	TSCA	The components of this product are all on the Active TSCA Inventory.
Canadian Domestic Substances List (DSL)	DSL	This product contains one or several components listed in the Canadian NDSL list. All other components are on the DSL list.
China. Inventory of Existing Chemical Substances in China (IECSC)	IECSC (CN)	Not all components of this product are listed or exempted
Japan. ENCS - Existing and New Chemical Substances Inventory	ENCS (JP)	Not all components of this product are listed or exempted
Japan. ISHL - Inventory of Chemical Substances	ISHL (JP)	Not all components of this product are listed or exempted
Korea. Korean Existing Chemicals Inventory (KECI)	KECI (KR)	Not all components of this product are listed or exempted
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	PICCS (PH)	Not all components of this product are listed or exempted
Australian Inventory of Industrial Chemicals	AU AIICL	Not all components of this product are listed or exempted
Taiwan Chemical Substance Inventory (TCSI)	TCSI	All components of this product are listed or exempted

United States – Federal Regulations**SARA Title III – Section 302 Extremely Hazardous Chemicals:**

The components in this product are either not SARA Section 302 regulated or regulated but present in negligible concentrations.

SARA Title III - Section 311/312 Hazard Categories:

Skin corrosion or irritation
Respiratory or skin sensitisation
Self-reactive chemicals

SARA Title III – Section 313 Toxic Chemicals:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Reportable Quantity (RQ):

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The components in this product are either not CERCLA regulated, regulated but present in negligible concentrations, or regulated with no assigned reportable quantity.

United States – State Regulations

California Prop. 65

WARNING! This product contains a chemical known to the State of California to cause cancer.

<u>Chemical name</u>	<u>CAS-No.</u>
2-Propenoic acid, 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester	15625-89-5

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

<u>Chemical name</u>	<u>CAS-No.</u>
Benzene, methyl-	108-88-3
Methanol	67-56-1

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H351 Suspected of causing cancer.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- H413 May cause long lasting harmful effects to aquatic life.

Latest Revision(s):

Reference number:	200025440
Date of Revision:	11/21/2023
Date Printed:	11/22/2023

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such products are used in combination with other materials or in any process. The performance of the product, its shelf life, and application characteristics depends on many variables, and changes in these variables can impact product performance. You are responsible to test the suitability of any product in advance for any intended use or application and before commercialization. Nothing herein shall be construed as a license for the use of any product in a manner that might infringe any patent and it should not be construed as an inducement to infringe any patent. Please carefully review the Safety Data Sheet for the product.

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