

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Specific treatment (see on this label). Take off contaminated clothing.

Storage: Protect from sunlight. Store in a well-ventilated place.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Acrylic ester acrylic acid acrylonitrile co-polymer	55973-76-7	20 - <50%
Ethane, 1,1-difluoro-	75-37-6	10 - <30%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

Inhalation: Move to fresh air.

Skin Contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Get medical attention.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Personal Protection for First-aid Responders: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Fight fire from a protected location. Stop flow of gas. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Pressurized container may explode when exposed to heat or flame.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Accidental release measures: Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

Methods and material for containment and cleaning up: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): No data available.

Safe handling advice: Avoid contact with eyes. Wash hands thoroughly after handling. Avoid contact with skin.

Contact avoidance measures: No data available.

Storage

Safe storage conditions: Protect from sunlight. Store in a cool place. Aerosol Level 1

Safe packaging materials: No data available.

Storage Temperature: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Morpholine	REL	20 ppm 70 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	STEL	30 ppm 105 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA	20 ppm	US. ACGIH Threshold Limit Values, as amended
	TWA	20 ppm 70 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	30 ppm 105 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	PEL	20 ppm 70 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR

			1910.1000), as amended
2-Propenenitrile	TWA	2 ppm	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	2 ppm	US. ACGIH Threshold Limit Values, as amended
	TWA	2 ppm	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended
	REL	1 ppm	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	Ceil_ Time	10 ppm	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	Ceiling	10 ppm	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	10 ppm	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended
	OSHA _ACT	1 ppm	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended

Exposure guidelines

Morpholine	US. ACGIH Threshold Limit Values, as amended	Can be absorbed through the skin.
2-Propenenitrile	US. ACGIH Threshold Limit Values, as amended	Can be absorbed through the skin.

Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: No data available.

Skin and Body Protection: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: Avoid contact with eyes. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. Avoid contact with skin. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	Spray Aerosol
Color:	No data available.
Odor:	No data available.
Odor Threshold:	No data available.
pH:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.
Flash Point:	Not applicable
Evaporation Rate:	No data available.
Flammability (solid, gas):	Non-flammable Aerosol
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density (air=1):	No data available.
Density:	No data available.
Relative density:	No data available.
Solubility in Water:	No data available.
Solubility (other):	No data available.

Partition coefficient (n-octanol/water):	No data available.
Self Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Kinematic viscosity:	No data available.
Dynamic viscosity:	No data available.
Explosive properties:	No data available.
Oxidizing properties:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	No data available.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product:	Not classified for acute toxicity based on available data.
Dermal Product:	Not classified for acute toxicity based on available data.
Inhalation Product:	Not classified for acute toxicity based on available data.

Repeated dose toxicity Product:	No data available.
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Components:

Ethane, 1,1-difluoro- NOAEL (Rat(Female, Male), Inhalation, 104 Weeks): 2.5 %(m) Inhalation
Experimental result, Key study

Skin Corrosion/Irritation

Product: No data available.

Components:

Acrylic ester acrylic acid acrylonitrile co- polymer estimated Irritating.

Ethane, 1,1-difluoro- estimated Not irritating

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in soil:

No data available.

Components:

Acrylic ester acrylic acid acrylonitrile co-polymer	No data available.
Ethane, 1,1-difluoro-	No data available.

Other adverse effects:

No data available.

13. Disposal considerations

Disposal instructions:

Wash before disposal. Dispose to controlled facilities.

Contaminated Packaging:

No data available.

14. Transport information

DOT

UN Number:	UN 1950
UN Proper Shipping Name:	Aerosols, non-flammable
Transport Hazard Class(es)	
Class:	2.2
Label(s):	–
EmS No.:	–
Packing Group:	–
Special precautions for user:	Not regulated.

IATA

UN Number: UN 1950
UN Proper Shipping Name: Aerosols, non-flammable
Transport Hazard Class(es):
Class: 2.2
Label(s): –
Packing Group: –
Special precautions for user: Not regulated.
Other information
Passenger and cargo aircraft: Allowed. 203
Cargo aircraft only: Allowed. 203

IMDG

UN Number: UN 1950
UN Proper Shipping Name: Aerosols, non-flammable
Transport Hazard Class(es):
Class: 2.2
Label(s): –
EmS No.: –
Packing Group: –
Special precautions for user: Not regulated.

15. Regulatory information

US Federal Regulations

Restrictions on use: Not known.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

Chemical Identity

2-Propenenitrile

OSHA hazard(s)

Eye irritation
Acute toxicity
Liver
Central nervous system
Flammability
Skin irritation
Skin sensitization
Respiratory irritation
Cancer

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity

Ethane, 1,1-difluoro-
UNLISTED HAZARDOUS WASTES CHARACTERISTIC OF IGNITABILITY
RCRA HAZARDOUS WASTE NO. D001
ACRYLONITRILE

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Gas under pressure, Skin Corrosion or Irritation, Serious eye damage or eye irritation

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

Chemical Identity

2-Propenenitrile

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

US State Regulations

US. California Proposition 65



WARNING: This product can expose you to chemicals including, 2-Propene nitrile which is [are] known to the State of California to cause cancer.

For more information go to www.P65Warnings.ca.gov.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Ethane, 1,1-difluoro-

US. Massachusetts RTK - Substance List

Chemical Identity

2-Propenenitrile

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol

Ethane, 1,1-difluoro- Group I Annex F

Stockholm convention

Ethane, 1,1-difluoro-

Rotterdam convention

Ethane, 1,1-difluoro-

Kyoto protocol

Inventory Status:

Australia AICS	Not in compliance with the inventory.
Canada DSL Inventory List	Not in compliance with the inventory.
Canada NDSL Inventory	Not in compliance with the inventory.
Ontario Inventory	Not in compliance with the inventory.
China Inv. Existing Chemical Substances	On or in compliance with the inventory
Japan (ENCS) List	Not in compliance with the inventory.
Japan ISHL Listing	Not in compliance with the inventory.
Japan Pharmacopoeia Listing	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI)	Not in compliance with the inventory.
Mexico INSQ	Not in compliance with the inventory.
New Zealand Inventory of Chemicals	On or in compliance with the inventory
Philippines PICCS	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory	Not in compliance with the inventory.
US TSCA Inventory	On or in compliance with the inventory
EINECS, ELINCS or NLP	Not in compliance with the inventory.

16. Other information, including date of preparation or last revision

Issue Date: 05/12/2021

Revision Information: No data available.

Version #: 1.0

Further Information: No data available.

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.