

SAFETY DATA SHEET

1. Identification

Material name: EUCEM CGA 10 ICARE 31

Material: RP 2199-5

Recommended use and restriction on use

Recommended use: Additive

Restrictions on use: Not for Consumer Use. For Industrial Use Only.

Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY
19218 REDWOOD ROAD
CLEVELAND OH 44110
US

Contact person:

EH&S Department

Telephone:

216-531-9222

Emergency telephone number:

1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Serious Eye Damage/Eye Irritation	Category 1
Specific Target Organ Toxicity - Single Exposure	Category 2

Unknown toxicity - Health

Acute toxicity, oral	33.16 %
Acute toxicity, dermal	32.93 %
Acute toxicity, inhalation, vapor	53.63 %
Acute toxicity, inhalation, dust or mist	52.04 %

Environmental Hazards

Acute hazards to the aquatic environment	Category 2
Chronic hazards to the aquatic environment	Category 3

Unknown toxicity - Environment

Acute hazards to the aquatic environment	60.77 %
Chronic hazards to the aquatic environment	77.35 %

Label Elements

Hazard Symbol:



Signal Word:

Danger

Hazard Statement:

Causes serious eye damage.
May cause damage to organs.
Toxic to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention:

Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear eye protection/face protection.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. IF exposed or concerned: Call a POISON CENTER/doctor.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Hazard(s) not otherwise classified (HNOC):

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
2-Propanol, 1,1',1"-nitrilotris-, hydrochloride (1:1)	58901-12-5	10 - <25%
Diethylene glycol	111-46-6	10 - <30%
Glycerine	56-81-5	0.1 - <1%
Ethanolamine	141-43-5	0.1 - <1%
1-Dodecanamine, N,N-dimethyl-	112-18-5	0.25 - <1%
Ethylene glycol	107-21-1	0.1 - <1%

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

4. First-aid measures

Description of necessary first-aid measures

Inhalation:	Move to fresh air.
Skin Contact:	Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.
Ingestion:	Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
Personal Protection for First-aid Responders:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Most important symptoms/effects, acute and delayed

Symptoms:	Extreme irritation of eyes and mucous membranes, including burning and tearing.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	Symptoms may be delayed.
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5. Fire-fighting measures

General Fire Hazards:	No unusual fire or explosion hazards noted.
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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:	During fire, gases hazardous to health may be formed.
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Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures:	No data available.
Special protective equipment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	No data available.
Accidental release measures:	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
Methods and material for containment and cleaning up:	Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.
Environmental Precautions:	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid release to the environment.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.
Safe handling advice:	Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash hands thoroughly after handling. Do not get in eyes. Use only in liquid solution form.
Contact avoidance measures:	No data available.
Hygiene measures:	Do not get in eyes. Observe good industrial hygiene practices. Avoid processes where workers could potentially be exposed to spray, dust, mist, or aerosol

Storage

Safe storage conditions:	Store away from incompatible materials. Store in original tightly closed container.
Safe packaging materials:	No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Glycerine - Total dust	PEL	15 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Glycerine - Respirable fraction	PEL	5 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Glycerine - Total dust	TWA	50 millions of particles per cubic foot of	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)



		air	
	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)
Glycerine - Respirable fraction	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)
	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended (09 2016)
Ethanolamine	TWA	3 ppm	US. ACGIH Threshold Limit Values, as amended (2011)
	STEL	6 ppm	US. ACGIH Threshold Limit Values, as amended (2011)
	PEL	3 ppm 6 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Ethylene glycol - Aerosol, inhalable	STEL	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2017)
Ethylene glycol - Vapor fraction	TWA	25 ppm	US. ACGIH Threshold Limit Values, as amended (03 2017)
	STEL	50 ppm	US. ACGIH Threshold Limit Values, as amended (03 2017)

Chemical name	Type	Exposure Limit Values	Source
Glycerine - Respirable mist	TWA	3 mg/m3	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007)
Glycerine - Mist.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Glycerine - Respirable fraction	TWA	3 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
Glycerine - Inhalable fraction	TWA	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
Glycerine - Total mist	TWA	10 mg/m3	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (06 2021)
Ethanolamine	TWA	3 ppm	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007)
	STEL	6 ppm	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007)
Ethanolamine	STEL	6 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
	TWA	3 ppm	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010)
Ethanolamine	STEL	6 ppm 15 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
	TWA	3 ppm 7.5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)



Ethylene glycol - Vapor	CEILING	50 ppm	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (07 2007)
Ethylene glycol - Vapor and mist	CEILING	50 ppm 127 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety), as amended (09 2017)
Ethylene glycol - Aerosol, inhalable	STEL	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (01 2020)
Ethylene glycol - Aerosol total	CEILING	100 mg/m3	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (06 2022)
	TWA	10 mg/m3	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (06 2022)
	STEL	20 mg/m3	Canada. British Columbia OELs: Table of Exposure Limits for Chemical Biological Substances (Workers Compensation Board); as amended (06 2022)

Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment (PPE)**Eye/face protection:**

Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection**Hand Protection:**

Additional Information: Use suitable protective gloves if risk of skin contact.

Skin and Body Protection:

Use personal protective equipment made of polyvinyl chloride or neoprene if dermal exposure may occur.

Respiratory Protection:

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

Hygiene measures:

Do not get in eyes. Observe good industrial hygiene practices. Avoid processes where workers could potentially be exposed to spray, dust, mist, or aerosol

9. Physical and chemical properties**Appearance****Physical state:**

liquid

Form:

liquid

Color:

Amber to brown

Odor:

Characteristic

Odor threshold:

No data available.

pH:

8



Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	Not applicable.
Evaporation rate:	Slower than Ether
Flammability (solid, gas):	No
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	1.085
Solubility(ies)	
Solubility in water:	Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	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:	Strong acids. Strong bases.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
Skin Contact:	Causes mild skin irritation.
Eye contact:	Causes serious eye damage.
Ingestion:	May be harmful if swallowed.

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:	ATEmix: 2,447.18 mg/kg
Dermal	
Product:	ATEmix: 26,561.54 mg/kg
Inhalation	
Product:	
Specified substance(s):	
Ethylene glycol	LC 50 (Rat): > 2.5 mg/l

Repeated dose toxicity

Product:	No data available.
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Skin Corrosion/Irritation

Product:	No data available.
Specified substance(s):	
Diethylene glycol	in vivo (Rabbit): not classified (CLP (1272/2008))
Ethanolamine	in vivo (Rabbit): Corrosive , 24 - 72 h in vivo (Rabbit): Category 1 , 24 - 72 h
1-Dodecanamine, N,N-dimethyl-	in vivo (Rabbit): Irritant , 24 - 72 h
Ethylene glycol	in vivo (Rabbit): not classified (CLP (1272/2008)) , 8 d

Serious Eye Damage/Eye Irritation

Product:	No data available.
Specified substance(s):	
Glycerine	Rabbit, 24 h: Not irritating



1-Dodecanamine, N,N- dimethyl- Rabbit, 1 h: Irritant

Ethylene glycol Rabbit, 24 - 72 h: Not irritating

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 1910.1001-1053), 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.

Specified substance(s):

Diethylene glycol	LC 50 (Pimephales promelas, 96 h): 49,000 mg/l
Glycerine	LC 50 (Pimephales promelas, 96 h): 885 mg/l
Ethanolamine	LC 50 (Cyprinus carpio, 96 h): 349 mg/l
1-Dodecanamine, N,N-dimethyl-	LC 50 (Oncorhynchus mykiss, 96 h): 1.8 mg/l
Ethylene glycol	LC 50 (Pimephales promelas, 96 h): 75,222 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Diethylene glycol	LC 50 (Daphnia magna, 48 h): 62,630 mg/l Experimental result, Key study
Glycerine	LC 50 (Daphnia magna, 48 h): 1,955 mg/l Experimental result, Supporting study
Ethanolamine	EC 50 (Daphnia magna, 48 h): 65 mg/l Experimental result, Supporting study
1-Dodecanamine, N,N-dimethyl-	EC 50 (Daphnia magna, 48 h): 66.5 µg/l Read-across based on grouping of substances (category approach), Key study
Ethylene glycol	LC 50 (Daphnia magna, 48 h): 62,630 mg/l Experimental result, Other

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Glycerine	NOEL : 724,000 mg/l QSAR
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Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Diethylene glycol	NOEC (Ceriodaphnia dubia): 8,590 mg/l experimental result Experimental result, Key study
Glycerine	NOEC (Ceriodaphnia dubia): 800 mg/l experimental result Experimental result, Weight of evidence

Ethanolamine	EC 50 (Daphnia magna): 2.5 mg/l experimental result Experimental result, Key study NOEC (Daphnia magna): 0.85 mg/l experimental result Experimental result, Key study
1-Dodecanamine, N,N-dimethyl-	NOEC (Daphnia magna): 0.036 mg/l experimental result Experimental result, Key study
Ethylene glycol	NOEC (Ceriodaphnia dubia): 8,590 mg/l experimental result Experimental result, Key study

**Toxicity to Aquatic Plants
Product:**

No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Diethylene glycol 71 % (28 d) Detected in water. Experimental result, Key study

Glycerine 98.7 % (24 h) Detected in water. Experimental result, Supporting study

1-Dodecanamine, N,N-dimethyl- 63 % (13 d) Detected in water. Experimental result, Key study

Ethylene glycol 90 - 100 % (10 d) Detected in water. Experimental result, Key study

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.

Specified substance(s):

Diethylene glycol Log Kow: -1.47

Glycerine Log Kow: -1.76

Ethanolamine Log Kow: -1.31

Ethylene glycol Log Kow: -1.36

Mobility in soil:

No data available.

Other adverse effects:

Toxic to aquatic organisms. Harmful to aquatic life with long lasting effects.

13. Disposal considerations

Disposal methods: Do not allow to enter drains, sewers or watercourses. Contact supplier for disposal information.

Contaminated Packaging: Contact supplier for disposal information.

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

Further Information:

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

15. Regulatory information

US Federal Regulations

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

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721 and 725, Subpt E)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Ethylene glycol	5000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

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

Not Regulated.

US. EPCRA (SARA Title III) Section 313 Toxic Chemical Release Inventory (TRI) Reporting

Not Regulated.

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

None present or none present in regulated quantities.

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

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65



WARNING

Cancer and Reproductive Harm - www.P65Warnings.ca.gov

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

VOC:

Regulatory VOC (less water and exempt solvent) : 5 g/l

VOC Method 310 : 0.22 %

Inventory Status:

Australia Industrial Chem. Act (AIIC):	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Ontario Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Mexico INSQ:	One or more components in this product are not listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
Taiwan Chemical Substance Inventory:	One or more components in this

product are not listed on or exempt from the Inventory.

US TSCA Inventory:

Subject to TSCA Section 5(e) consent order. Refer to written agreement with Euclid restrictions

Switzerland New Subs
Notified/Registered:

One or more components in this product are not listed on or exempt from the Inventory.

Thailand DIW Existing Chemical Inv.
List:

One or more components in this product are not listed on or exempt from the Inventory.

Vietnam National Chemical Inventory:

One or more components in this product are not listed on or exempt from the Inventory.

EC Inventory:

One or more components in this product are not listed on or exempt from the Inventory.

16. Other information, including date of preparation or last revision
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Revision Date: 06/27/2025

Version #: 2.0

Further Information: No data available.

Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.