



# SAFETY DATA SHEET

## 1. Identification

**Material name:** EUCON FOR-CAST S - 55 GALLON DRUM  
**Material:** 132 55

### Recommended use and restriction on use

**Recommended use:** Additive  
**Restrictions on use:** Not known.

### 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

Carcinogenicity Category 2

#### Unknown toxicity - Health

Acute toxicity, oral	0.052 %
Acute toxicity, dermal	2.1 %
Acute toxicity, inhalation, vapor	7.59 %
Acute toxicity, inhalation, dust or mist	5.97 %

### Label Elements

#### Hazard Symbol:



**Signal Word:** Warning

**Hazard Statement:** Suspected of causing cancer.

**Precautionary Statements**

- Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
- Response:** IF exposed or concerned: Get medical advice/attention.
- Storage:** Store locked up.
- Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

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

**3. Composition/information on ingredients****Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
Coconut diethanolamide	68603-42-9	1 - <5%
Triethanolamine	102-71-6	1 - <5%
Benzenesulfonic acid, C10-16-alkyl derivatives	68584-22-5	1 - <5%
Diethanolamine	111-42-2	0.1 - <1%
Glycerine	56-81-5	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**

- Ingestion:** Rinse mouth thoroughly.
- Inhalation:** Move to fresh air.
- Skin Contact:** Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
- Eye contact:** Rinse immediately with plenty of water.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** May cause skin and eye irritation.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Symptoms may be delayed.

**5. Fire-fighting measures**



**General Fire Hazards:** No unusual fire or explosion hazards noted.

**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.

**Special protective equipment and precautions for firefighters**

**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.

**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.

**Notification Procedures:** In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

**Environmental Precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

**7. Handling and storage**

**Precautions for safe handling:** Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities:** Store locked up.

**8. Exposure controls/personal protection**

**Control Parameters****Occupational Exposure Limits**

Chemical Identity	Type	Exposure Limit Values	Source
Triethanolamine	TWA	5 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2011)
	ST ESL	50 µg/m <sup>3</sup>	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)
	AN ESL	5 µg/m <sup>3</sup>	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)
	TWA PEL	5 mg/m <sup>3</sup>	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
Diethanolamine - Inhalable fraction and vapor.	TWA	1 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2011)
Glycerine - Total dust.	PEL	15 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Glycerine - Respirable fraction.	PEL	5 mg/m <sup>3</sup>	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Chemical name	Type	Exposure Limit Values	Source
Triethanolamine	TWA	5 mg/m <sup>3</sup>	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Triethanolamine	TWA	5 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Triethanolamine	TWA	0.5 ppm 3.1 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Triethanolamine	TWA	5 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Diethanolamine	TWA	2 mg/m <sup>3</sup>	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Diethanolamine - Inhalable fraction and vapor.	TWA	1 mg/m <sup>3</sup>	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Diethanolamine	TWA	3 ppm 13 mg/m <sup>3</sup>	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

**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**

**General information:** Use personal protective equipment as required.

**Eye/face protection:** Wear goggles/face shield.

**Skin Protection**

**Hand Protection:** Use suitable protective gloves if risk of skin contact.

**Other:** No data available.



<b>Respiratory Protection:</b>	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
<b>Hygiene measures:</b>	Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Amber
<b>Odor:</b>	Mild
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	7 - 10
<b>Melting point/freezing point:</b>	No data available.
<b>Initial boiling point and boiling range:</b>	No data available.
<b>Flash Point:</b>	No data available.
<b>Evaporation rate:</b>	Slower than Ether
<b>Flammability (solid, gas):</b>	No
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
<b>Relative density:</b>	1.01
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Soluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	No data available.



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<b>Conditions to avoid:</b>	Avoid heat or contamination.
<b>Incompatible Materials:</b>	Strong acids. Strong bases.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
<b>Skin Contact:</b>	Moderately irritating to skin with prolonged exposure.
<b>Eye contact:</b>	Eye contact is possible and should be avoided.
<b>Ingestion:</b>	May be ingested by accident. Ingestion may cause irritation and malaise.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation:</b>	No data available.
<b>Skin Contact:</b>	No data available.
<b>Eye contact:</b>	No data available.
<b>Ingestion:</b>	No data available.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

<b>Oral Product:</b>	ATEmix: 237,175.95 mg/kg
<b>Dermal Product:</b>	ATEmix: 64,890.82 mg/kg
<b>Inhalation Product:</b>	ATEmix: 118.37 mg/l

<b>Repeated dose toxicity Product:</b>	No data available.
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<b>Skin Corrosion/Irritation Product:</b>	No data available.
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**Specified substance(s):**



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Triethanolamine	in vivo (Rabbit): Not irritant Experimental result, Key study
Benzenesulfonic acid,C10-16-alkyl derivatives	in vivo (Rabbit): Not irritant Read-across based on grouping of substances (category approach), Key study

**Serious Eye Damage/Eye Irritation****Product:** No data available.**Specified substance(s):**

Benzenesulfonic acid,C10-16-alkyl derivatives	Rabbit, 24 hrs: Irritating
Glycerine	Rabbit, 24 hrs: Not irritating

**Respiratory or Skin Sensitization****Product:** No data available.**Carcinogenicity****Product:** Suspected of causing cancer.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Coconut diethanolamide	Overall evaluation: Possibly carcinogenic to humans.
Diethanolamine	Overall evaluation: Possibly carcinogenic to humans.

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

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

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):**

Triethanolamine	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 10,610 - 13,010 mg/l Mortality LC 50 (Pimephales promelas, 96 h): 11,800 mg/l Experimental result, Key study
Diethanolamine	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 100 mg/l Mortality
Glycerine	LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 51,000 - 57,000 mg/l Mortality

**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**

Triethanolamine	EC 50 (Ceriodaphnia dubia, 48 h): 609.88 mg/l Experimental result, Key study
Benzenesulfonic acid, C10-16-alkyl derivatives	EC 50 (Water flea (Ceriodaphnia dubia), 48 h): 4.66 - 6.83 mg/l Intoxication
Diethanolamine	EC 50 (Water flea (Ceriodaphnia dubia), 48 h): 61.8 - 86.04 mg/l Intoxication

**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.



**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**

Triethanolamine NOEC (Daphnia magna, 21 d): 125 mg/l Experimental result, Key study

**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.**Specified substance(s):**Triethanolamine Various, Bioconcentration Factor (BCF): 0.89 Aquatic sediment QSAR, Supporting study  
Cyprinus carpio, Bioconcentration Factor (BCF): < 3.9 Aquatic sediment Experimental result, Key study  
Bioconcentration Factor (BCF): 3.02 Aquatic sediment QSAR, Weight of Evidence study  
Bioconcentration Factor (BCF): 0.68 Aquatic sediment QSAR, Supporting study  
Bioconcentration Factor (BCF): 0.96 Aquatic sediment QSAR, Supporting study**Partition Coefficient n-octanol / water (log Kow)****Product:** No data available.**Specified substance(s):**Triethanolamine Log Kow: -1.00  
Log Kow: -1.75 - -1.32 No Estimated by calculation, Weight of Evidence study  
Diethanolamine Log Kow: -1.43  
Glycerine Log Kow: -1.76**Mobility in soil:** No data available.**Other adverse effects:** No data available.



**13. Disposal considerations**

**Disposal instructions:** Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:** No data available.

**14. Transport information**

**TDG:**

Not Regulated

**CFR / DOT:**

Not Regulated

**IMDG:**

Not Regulated

**15. Regulatory information**

**US Federal Regulations**

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

None present or none present in regulated quantities.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Diethanolamine	100 lbs.
Sodium hydroxide	1000 lbs.
Sulfuric acid	1000 lbs.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Delayed (Chronic) Health Hazard  
Carcinogenicity

**SARA 302 Extremely Hazardous Substance**

<u>Chemical Identity</u>	<u>Reportable quantity</u>	<u>Threshold Planning Quantity</u>
Sulfuric acid	1000 lbs.	1000 lbs.



**SARA 304 Emergency Release Notification**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Diethanolamine	100 lbs.
Sodium hydroxide	1000 lbs.
Sulfuric acid	1000 lbs.
[1,1'-Biphenyl]-2-ol, sodium salt (1:1)	

**SARA 311/312 Hazardous Chemical**

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Sulfuric acid	500lbs
Coconut diethanolamide	10000 lbs
Triethanolamine	10000 lbs
Benzenesulfonic acid,C10- 16-alkyl derivatives	10000 lbs
Diethanolamine	10000 lbs
Glycerine	10000 lbs

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

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

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Sulfuric acid	lbs

**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**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Coconut diethanolamide	Carcinogenic. 06 2015
Diethanolamine	Carcinogenic. 07 2012
Sulfuric acid	Carcinogenic. 09 2011
[1,1'-Biphenyl]-2-ol, sodium salt (1:1)	Carcinogenic. 09 2011

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

<u>Chemical Identity</u>
Triethanolamine

**US. Massachusetts RTK - Substance List**

<u>Chemical Identity</u>
Triethanolamine
Sulfuric acid
[1,1'-Biphenyl]-2-ol, sodium salt (1:1)

**US. Pennsylvania RTK - Hazardous Substances**

<u>Chemical Identity</u>
Triethanolamine



**US. Rhode Island RTK**

**Chemical Identity**

Triethanolamine

**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) : 2 g/l

VOC Method 310 : 0.01 %

**Inventory Status:**

Australia AICS:	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	All components in this product are listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	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.
China Inv. Existing Chemical Substances:	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.
Canada NDSL Inventory:	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.
US TSCA Inventory:	All components in this product are 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.
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.

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

<b>Revision Date:</b>	08/01/2017
<b>Version #:</b>	3.0
<b>Further Information:</b>	No data available.



EUCLID CHEMICAL

Version: 3.0  
Revision Date: 08/01/2017

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**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.