# SAFETY DATA SHEET

## 1. Identification

**Material name:** EUCON WR 91 - BULK GALLONS
**Material:** 024C 99

**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**

Not classified

**Label Elements**

| | |
|---|---|
| **Hazard Symbol:** | No symbol |
| **Signal Word:** | No signal word. |
| **Hazard Statement:** | Not applicable |
| **Precautionary Statements** | Not applicable |

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

## 3. Composition/information on ingredients

**Mixtures**

| Chemical Identity | CAS number | Content in percent (%)* |
|---|---|---|

| | | |
|---|---|---|
| Triethanolamine | 102-71-6 | 1 - <5% |

* 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:** Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

**Eye contact:** Rinse immediately with plenty of water.

**Ingestion:** Rinse mouth thoroughly.

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

**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:** 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. |
| **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:** | 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

**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.Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
| **Contact avoidance measures:** | No data available. |
| **Hygiene measures:** | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. |

**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 |
|---|---|---|---|
| Triethanolamine | ST ESL | 50 µg/m3 | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (07 2011) |
| | AN ESL | 5 µg/m3 | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (07 2011) |
| | TWA PEL | 5 mg/m3 | US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as |

| | | | |
|---|---|---|---|
| | | | amended (08 2010) |
| | TWA | 5 mg/m3 | US. ACGIH Threshold Limit Values, as amended (2011) |

| Chemical name | Type | Exposure Limit Values | Source |
|---|---|---|---|
| Triethanolamine | TWA | 5 mg/m3 | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2), as amended (07 2009) |
| Triethanolamine | TWA | 5 mg/m3 | 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/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Triethanolamine | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017) |

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| Triethanolamine | TWA | 5 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017) |
| Sodium hydroxide | CEILING | 2 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Sodium hydroxide | CEV | 2 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended (11 2010) |
| Sodium hydroxide | CEILING | 2 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment), as amended (09 2017) |

**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.

| | |
|---|---|
| **Respiratory Protection:** | In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor. |
| **Hygiene measures:** | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. |

## 9. Physical and chemical properties

| | |
|---|---|
| **Appearance** | |
| **Physical state:** | liquid |
| **Form:** | liquid |
| **Color:** | Brown |
| **Odor:** | Mild |
| **Odor threshold:** | No data available. |
| **pH:** | 4.0 - 8.0 |
| **Melting point/freezing point:** | No data available. |
| **Initial boiling point and boiling range:** | No data available. |
| **Flash Point:** | No data available. |
| **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:** | Vapors are heavier than air and may travel along the floor and in the bottom of containers. |
| **Relative density:** | +/- 0.0207 1.2065 |
| **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:** | Moderately irritating to skin with prolonged exposure. |
| **Eye contact:** | Eye contact is possible and should be avoided. |
| **Ingestion:** | May be ingested by accident. Ingestion may cause irritation and malaise. |

**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. |

**Specified substance(s):**

| | |
|---|---|
| Triethanolamine | LD 50 (Rat): 6,400 mg/kg |

**Dermal**

| | |
|---|---|
| **Product:** | Not classified for acute toxicity based on available data. |

**Specified substance(s):**

| | |
|---|---|
| Triethanolamine | LD 50 (Rabbit): > 2,000 mg/kg |

**Inhalation**

| | |
|---|---|
| **Product:** | Not classified for acute toxicity based on available data. |

**Repeated dose toxicity**
**Product:** No data available.

**Skin Corrosion/Irritation**
**Product:** No data available.

**Specified substance(s):**
Triethanolamine in vivo (Rabbit): Not irritant

**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):**
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

**Aquatic Invertebrates**

**Product:** No data available.

**Specified substance(s):**

Triethanolamine — EC 50 (Ceriodaphnia dubia, 48 h): 609.88 mg/l Experimental result, Key study

**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: -1.75 - -1.32 No Estimated by calculation, Weight of Evidence study
Log Kow: -1.00

**Mobility in soil:** No data available.

**Other adverse effects:** No data available.

## 13. Disposal considerations

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

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):**

| Chemical Identity | Reportable quantity |
|---|---|
| Sodium hydroxide | 1000 lbs. |

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

**Hazard categories**

Not classified
Not classified

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

None present or none present in regulated quantities.

**SARA 311/312 Hazardous Chemical**

| Chemical Identity | Threshold Planning Quantity |
|---|---|

**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)**

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 - www.P65Warnings.ca.gov

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

**Chemical Identity**
Triethanolamine

**US. Massachusetts RTK - Substance List**

**Chemical Identity**
Triethanolamine
[1,1'-Biphenyl]-2-ol, sodium salt (1:1)

**US. Pennsylvania RTK - Hazardous Substances**

**Chemical Identity**
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) | : | 0 g/l |
| VOC Method 310 | : | 0.00 % |

**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

| | |
|---|---|
| **Revision Date:** | 12/20/2019 |
| **Version #:** | 1.3 |
| **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.