



SAFETY DATA SHEET

1. Identification

Material name: BARACADE 40% IPA

Material: TL19265I 55

Recommended use and restriction on use

Recommended use: Coatings

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

Physical Hazards

Flammable liquids Category 1

Health Hazards

Carcinogenicity Category 1A

Unknown toxicity - Health

| | |
|--|---------|
| Acute toxicity, oral | 1.68 % |
| Acute toxicity, dermal | 38.32 % |
| Acute toxicity, inhalation, vapor | 100 % |
| Acute toxicity, inhalation, dust or mist | 63.36 % |

Unknown toxicity - Environment

| | |
|--|--------|
| Acute hazards to the aquatic environment | 39.6 % |
| Chronic hazards to the aquatic environment | 100 % |

Label Elements

Hazard Symbol:



Signal Word:

Danger



| | |
|---|--|
| Hazard Statement: | Extremely flammable liquid and vapor. May cause cancer. |
| Precautionary Statement: | |
| Prevention: | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. 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 ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If exposed or concerned: Get medical advice/attention. In case of fire: Use ... to extinguish. |
| Storage: | Store in well-ventilated place. Keep cool. 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. |
| Other hazards which do not result in GHS classification: | Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion. |

3. Composition/information on ingredients

Mixtures

| Chemical Identity | CAS number | Content in percent (%)* |
|-------------------|------------|-------------------------|
| 2-Propanol | 67-63-0 | 60 - 100% |
| Methanol | 67-56-1 | 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

| | |
|---|--|
| Ingestion: | Rinse mouth thoroughly. |
| Inhalation: | Move to fresh air. |
| Skin Contact: | Get medical attention if symptoms occur. Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| Eye contact: | Rinse immediately with plenty of water. |
| Most important symptoms/effects, acute and delayed | |
| Symptoms: | Respiratory tract irritation. |

Indication of immediate medical attention and special treatment needed



Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. 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: Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical: Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.

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: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.

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

**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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Store locked up. Store in a well-ventilated place. Store in a cool place.

8. Exposure controls/personal protection**Control Parameters****Occupational Exposure Limits**

| Chemical Identity | type | Exposure Limit Values | Source |
|-------------------|------|------------------------|---|
| 2-Propanol | TWA | 200 ppm | US. ACGIH Threshold Limit Values (2011) |
| | STEL | 400 ppm | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 400 ppm 980 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Methanol | TWA | 200 ppm | US. ACGIH Threshold Limit Values (2011) |
| | STEL | 250 ppm | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 200 ppm 260 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
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| Chemical name | type | Exposure Limit Values | Source |
|---------------|-------|--------------------------|---|
| 2-Propanol | STEL | 400 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | TWA | 200 ppm | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| 2-Propanol | TWAEV | 200 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| | STEL | 400 ppm | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| 2-Propanol | TWA | 400 ppm 983 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| | STEL | 500 ppm 1,230 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |

Biological Limit Values

| Chemical Identity | Exposure Limit Values | Source |
|--|-----------------------|---------------------|
| 2-Propanol (acetone: Sampling time: End of shift at end of work week.) | 40 mg/l (Urine) | ACGIH BEL (03 2013) |
| Methanol (methanol: Sampling time: End of shift.) | 15 mg/l (Urine) | ACGIH BEL (03 2013) |

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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 explosion-proof ventilation equipment. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. |
| 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: | Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. When using do not smoke. |

9. Physical and chemical properties**Appearance**

| | |
|--|---|
| Physical state: | liquid |
| Form: | liquid |
| Color: | Colorless |
| Odor: | Mild petroleum/solvent |
| Odor threshold: | No data available. |
| pH: | No data available. |
| Melting point/freezing point: | No data available. |
| Initial boiling point and boiling range: | No data available. |
| Flash Point: | 12 °C 54 °F(Tag closed cup) |
| 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: | 0.82 |
| Solubility(ies) | |
| Solubility in water: | Practically Insoluble |
| 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: Heat, sparks, flames.

Incompatible Materials: Strong acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides and chromates). 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

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

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.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product: ATEmix: 13,646.29 mg/kg

Dermal Product: No data available.

Inhalation Product: No data available.

Repeated dose toxicity Product: No data available.

Skin Corrosion/Irritation



Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

2-Propanol in vivo (Rabbit, 24 hrs): Category 2: Causes serious eye irritation

Methanol in vivo (Rabbit, 24 hrs): 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:

2-Propanol Overall evaluation: Carcinogenic to humans. Overall evaluation: Not classifiable as to carcinogenicity 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):**2-Propanol LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 11,130 mg/l MortalityMethanol LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 28,200 mg/l Mortality**Aquatic Invertebrates****Product:** No data available.**Specified substance(s):**2-Propanol LC 50 (Water flea (*Daphnia magna*), 24 h): > 10,000 mg/l MortalityLC 50 (Brine shrimp (*Artemia salina*), 24 h): > 10,000 mg/l MortalityMethanol LC 50 (Water flea (*Daphnia magna*), 24 h): 3,616 - 6,414 mg/l Mortality
EC 50 (Water flea (*Daphnia magna*), 48 h): > 10,000 mg/l Intoxication
EC 50 (Water flea (*Daphnia magna*), 24 h): > 10,000 mg/l Intoxication
LC 50 (Water flea (*Daphnia magna*), 96 h): > 100 mg/l Mortality
LC 50 (Oligochaete, worm (*Lumbriculus variegatus*), 96 h): > 100 mg/l Mortality**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Specified substance(s):**Methanol NOAEL (*Oryzias latipes*, 200 h): 11,850 mg/l experimental result**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.**Specified substance(s):**Methanol Green algae (*Chlorella fusca vacuolata*), Bioconcentration Factor (BCF): 28,400 (Static)**Partition Coefficient n-octanol / water (log Kow)****Product:** No data available.**Specified substance(s):**

2-Propanol Log Kow: 0.05

Methanol Log Kow: -0.77

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:**

UN1993, FLAMMABLE LIQUID, N.O.S. (Isopropyl Alcohol), 3, PG II

CFR / DOT:

UN1993, Flammable liquids, n.o.s. (Isopropyl Alcohol), 3, PG II

IMDG:

UN1993, FLAMMABLE LIQUID, N.O.S. (Isopropyl Alcohol), 3, PG II

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)**

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> |
|--------------------------|----------------------------|
| 2-Propanol | 100 lbs. |
| Methanol | 5000 lbs. |
| Octene | 100 lbs. |

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

Fire Hazard

Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

| <u>Chemical Identity</u> | <u>Reportable quantity</u> |
|--------------------------|----------------------------|
| 2-Propanol | 100 lbs. |
| Methanol | 5000 lbs. |
| Octene | 100 lbs. |

SARA 311/312 Hazardous Chemical

| <u>Chemical Identity</u> | <u>Threshold Planning Quantity</u> |
|--------------------------|------------------------------------|
| 2-Propanol | 500 lbs |
| Methanol | 500 lbs |

SARA 313 (TRI Reporting)

| <u>Chemical Identity</u> |
|--------------------------|
| 2-Propanol |

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

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.

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.

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

| <u>Chemical Identity</u> |
|--------------------------|
| 2-Propanol |

US. Massachusetts RTK - Substance List

| <u>Chemical Identity</u> |
|--------------------------|
| 2-Propanol |



US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

2-Propanol

US. Rhode Island RTK

Chemical Identity

2-Propanol

Other Regulations:

| | |
|--|---------|
| Regulatory VOC (less water and exempt solvent): | 580 g/l |
| VOC Method 310: | 70.52 % |

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

Revision Date: 11/12/2015

Version #: 1.0

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.