COLORADO
Office of Emergency Preparedness & Response
Department of Public Health & Environment

Print date 7/17/2018

CASE NUMBER: 2018-0350 DATE ENTERED: 7/17/2018 TIME ENTERED: 8:34

WHO TOOK REPORT: JULIANN/ ANN NEDROW DATE REPORTED: 7/16/2018 TIME REPORTED: 9:23:00 PM

NRC NUMBER:

CALLER: JOSEPH HARRINGTON CONFIDENTIAL: N PHONE: 720-883-6700

ORGANIZATION: LONDON MINE

STREET: 1269 CR 696

CITY: ALMA COUNTY:

STATE: CO ZIP CODE: 80420-

POTENTIALLY RESPONSIBLE PARTY: LONDON MINE

PRP CONTACT: JOSEPH HARRINGTON PRP PHONE: 720-883-6700

ADDRESS: 1269 CR 696 EMAIL: jgh@minewater.com

CITY: ALMA COUNTY:

STATE: CO ZIP CODE: 80420-

EVENT DATE: 7/16/2018 EVENT TIME: 7:00:00 PM

LOCATION: 1269 CR 696, LONDON MINE MILE MARKER:

CITY: ALMA COUNTY: PARK

STATE: CO ZIP CODE: 80420-

Latitude:

Longitude:

TYPE OF MATERIAL: OTHER

MATERIAL1:	METHYL ALCOHOL WITH BUTANEDIOL	QUANTITY1:	100	UNIT1:	GALLONS	QTY TO WATER1:	100	UNIT1:	G
MATERIAL2:		QUANTITY2:		UNIT2:		QTY TO WATER2:		UNIT2:	
MATERIAL3:	PERMIT # CO 0038334	QUANTITY3:		UNIT3:		QTY TO WATER3:		UNIT3:	

SOURCE: X

SOURCE TYPE: GOLD MINE

CAUSE: FAILURE EQUIPMENT

CAUSE INFORMATION: A peristaltic pump head burst sometime over the weekend, and is thought to have released no more than 100 gallons of methanol which contains a small amount of butanediol. An SDS will be included with the email. A recent landslide destroyed what would have been a berm to prevent this release from reaching the creek. Caller states that replacing a berm at this point will be a priority for him. Tyler Stolzfus with CPW has investigated,. The caller noted no damage to aquatic life, but they will check the entire path of Mosquito Creek to the S. Platte River today looking for impacts on aquatic life. They think the release has stopped at this point, but the caller is en route to look things over.

Print date 7/17/2018

MEDIUM IMPACTED: WATER ☐ Fixed Facility ☐ Land ☐ Air ☐ Groundwater

☑ Surface Water Waterway Impacted: MOSQUITO CREEK --> MIDDLE FORK S. PLATTE RIVER

NUMBER OF DEATHS: NUMBER OF INJURIES: EVACUATION: NUMBER EVACUATED:

ACTION TAKEN:

CDPHE NOTIFIED: WQCD:MICHELLE THIEBAUD, DAVID KURZ, JORGE DELGADO, CAMERON WILKINS, KELLY JACQUES, ANNE MARIE GOOLSBY; KELLY MORGAN;L DRMS:RUSS MEANS, WALLY ERICKSON;

COMMENTS: Park County EH

RESPONDERS: LONDON MINE

RESPONDER COMMENTS:

ADDITIONAL COMMENTS:

MicroC® 3000

EOSi
Green Solutions For Achieving Your Limits

USDA CERTIFIED BIOBASED PRODUCT
PRODUCT 100%

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product Name: MicroC® 3000 **Publication Date:** February 9, 2018

Product Code: NA **Replaces:** December 28, 2016

Product Use: A reducing agent for biological processes

Supplier Information:
Environmental Operating Solutions, Inc
160 MacArthur Blvd., Unit 6
Bourne, MA 02532

Phone: 508-743-8440
Fax: 508-743-8443
Website: www.microc.com

EMERGENCY TELEPHONE NUMBER: **CHEMTREC** **800-424-9300**

2. HAZARDS IDENTIFICATION

Emergency Overview

Danger Highly flammable liquid and vapor. Causes serious eye damage. Vapors may be irritating to eyes, nose, throat, and lungs. Inhalation, ingestion, or skin absorption of methanol can cause significant disturbance in vision, including blindness. Not for human consumption

Appearance	Physical State	Odor
Clear to slightly cloudy and colorless to amber	Liquid	Slight Alcohol to Pungent

Classification according to 29 CFR 1910, amended to conform to the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals (GHS):	
Serious Eye Damage / Eye Irritation	Category 1
Specific Target Organ Toxicity (STOT) Single Exposure.	Category 1 Affected organs: Optic nerve (nervus opticus), central nervous system.
Flammable Liquids	Category 2

OSHA / GHS Label Elements	
Signal Word:	Danger
GHS Hazard Pictogram(s):	
Hazard Statement(s):	H225 Highly flammable liquid and vapour H318 Causes serious eye damage H370 Causes Damage to organs. (Affected organs: optic nerve (nervus opticus), central nervous system.)

Prevention Precautionary Statements:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Use only non-sparking tools. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product. Do not breathe fume/gas/mist/vapors/spray. Wash hands and exposed skin thoroughly after handling.
Response Precautionary Statements:
In case of fire: Use Alcohol-resistant foam / dry chemical / carbon dioxide (CO2) to extinguish. Do not use a solid water stream as it may scatter and spread fire. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If on skin (or hair): Take off immediately, all contaminated clothing. Rinse skin with water. If exposed: Get medical advice/attention.
Storage Precautionary Statements:
Store locked up. Store in a well-ventilated place. Keep cool.
Disposal Precautionary Statements:
Dispose of contents/container in accordance with all applicable national and local regulations.

Up to 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
Up to 25 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
Up to 20 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family Alcohols

The following component(s) in this product are considered hazardous under applicable OSHA (USA), WHMIS (Canada), and/or NOM-002-SCT-2003 (Mexico) regulations

Chemical Name	CAS-No	Weight %	North American Hazard Indicator
Methyl alcohol	67-56-1	65-97% (anhydrous basis)	OSHA / GHS:. Flam. Liq. 3. Acute Tox. 3. (oral). (dermal). (inhalation). STOT SE, Cat. 1. Affected organs: Optic nerve (nervus opticus), central nervous system. WHMIS:. D1B, D2A, D2B. B2.
2-Propanol	67-63-0	25% max. (anhydrous basis)	OSHA / GHS:. Flam. Liq. 2. Eye Irrit. 2. STOT SE 3. (inhalation). yes.
Ethyl alcohol	64-17-5	20% max. (anhydrous basis)	OSHA / GHS:. Flam. Liq. 2. Eye Irrit. 2. WHMIS:. B2. D2B.
1-Propanol	71-23-8	5% max. (anhydrous basis)	OSHA / GHS:. Flam. Liq. 2. Eye Dam. 1. STOT SE 3. (inhalation).

Additives / Other Ingredients

Also contains:. Water. Propylene glycol.

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Seek Medical advice.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Consult a physician if necessary.

Inhalation Move to fresh air in case of accidental inhalation of vapors. Artificial respiration and/or oxygen may be necessary. Call a physician immediately.

Ingestion Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Swallowing methanol in significant quantities can be potentially life threatening. Onset of symptoms may be delayed for up to 18-24 hours after ingestion. Call a physician or Poison Control Centre immediately.

Protection of First-aiders Use personal protective equipment. Remove all sources of ignition.

General Advice When symptoms persist or in all cases of doubt seek medical advice.

Most important symptoms and affects, both acute and delayed

Eyes: Risk of serious damage to eyes.
Skin: May cause slight skin irritation.
Inhalation: Inhalation of methanol can cause significant disturbance in vision, including blindness. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Inhalation of vapors in high concentration may cause irritation of respiratory system. In humans, ethanol is readily absorbed by the oral and inhalation routes, is distributed throughout all tissues and organs and is readily, metabolized and excreted.
Ingestion: May cause drowsiness and dizziness. Lack of coordination. Nausea. Vomiting. Abdominal pain. Unconsciousness. Ingestion may cause irritation to mucous membranes. Ingestion of methanol may be fatal or cause blindness.
Main Symptoms: Nausea. Vomiting. Dizziness. Drowsiness. Coma. Severe vision effects, including increased sensitivity to light, blurred vision, and blindness may develop following an 18-24 hour symptom-free period after ingestion.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Contains methanol. Acute exposure to methanol, either through ingestion or breathing high airborne concentrations can result in symptoms appearing between 40 minutes and 72 hours after exposure. Symptoms and signs are usually limited to the Central Nervous System (CNS), eyes and gastrointestinal tract. A profound metabolic acidosis occurs in severe poisoning and serum bicarbonate levels are a more accurate measure of severity than serum methanol levels. Treatment protocols are available from most major hospitals and early collaboration with appropriate hospitals is recommended. Ethanol significantly decreases the toxicity of methanol because it competes for the same metabolic enzymes, and has been used to treat methanol poisoning.

5. FIRE-FIGHTING MEASURES

Flammable Properties

Flammable liquid. Vapors may cause flash fire or explosion. Vapors may form explosive mixtures with air. Material may pose fire hazard because it is dispersed (or spread) by water.

Extinguishing media

Suitable Extinguishing Media Alcohol-resistant foam. Dry chemical. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Evacuate area and fight fire from a safe distance. Cool closed containers exposed to fire with water spray.
Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire.

Special hazards arising from the substance or mixture

Hazardous Combustion Product.	Thermal decomposition can lead to release of irritating gases and vapors Carbon monoxide (CO), Carbon dioxide (CO2), Formaldehyde, Formic Acid.
Specific Hazards Arising from the Chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition.
Sensitivity to mechanical impact	No information available.
Sensitivity to static discharge	Yes.

Advice for fire-fighters

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health: 2 **Stability and Reactivity:** 0

Flammability: 3 **Physical hazard:** None known

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid
contact with the skin and the eyes. Remove all sources of ignition. Take precautionary measures against static discharges. Pay attention to flashback.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and Materials for Containment and Cleaning Up

Small spills: Allow to evaporate if it is safe to do so or contain and absorb using earth, sand or other inert material then transfer into
suitable containers for recovery or disposal. Ventilate contaminated area thoroughly. Use non-sparking tools. Do not use electrical equipment unless it is intrinsically safe.
Large spills: Dike or dam to contain for later disposal. Cover drains. Contact emergency authorities.

6. ACCIDENTAL RELEASE MEASURES

Handling

Wear personal protective equipment. Avoid contact with skin and eyes. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use product only in closed system. Do not breathe vapors or spray mist. Use only in area provided with appropriate exhaust ventilation.

Storage

Keep away from heat and sources of ignition. Keep in properly labelled containers. Keep containers tightly closed in a cool, well-ventilated place.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Limits

Components with workplace control parameters

Chemical Name	ACGIH TLV	OSHA PEL	Mexico	NIOSH
Methyl alcohol	STEL: 250 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 260 mg/m3	TWA: 200 ppm (LMPE-PPT) TWA: 260 mg/m3 (LMPE-PPT) STEL: 250 ppm (LMPE-CT) STEL: 310 mg/m3 (LMPE-CT) Skin	IDLH: 6000 ppm Skin STEL: 250 ppm STEL: 325 mg/m3 TWA: 200 ppm TWA: 260 mg/m3
2-Propanol	STEL: 400 ppm TWA: 200 ppm	TWA: 400 ppm TWA: 980 mg/m3	TWA: 400 ppm (LMPE-PPT) TWA: 980 mg/m3 (LMPE-PPT) STEL: 500 ppm (LMPE-CT) STEL: 1225 mg/m3 (LMPE-CT)	IDLH: 2000 ppm 10% LEL STEL: 500 ppm STEL: 1225 mg/m3 TWA: 400 ppm TWA: 980 mg/m3
Ethyl alcohol	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m3	TWA: 1000 ppm (LMPE-PPT) TWA: 1900 mg/m3 (LMPE-PPT)	IDLH: 3300 ppm 10% LEL TWA: 1000 ppm TWA: 1900 mg/m3
1-Propanol	TWA: 100 ppm	TWA: 200 ppm TWA: 500 mg/m3	TWA: 200 ppm (LMPE-PPT) TWA: 500 mg/m3 (LMPE-PPT) STEL: 250 ppm (LMPE-CT) STEL: 625 mg/m3 (LMPE-CT) Skin	IDLH: 800 ppm Skin STEL: 250 ppm STEL: 625 mg/m3 TWA: 200 ppm TWA: 500 mg/m3

Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.

General Hygiene Considerations

When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing. Handle in accordance with good industrial hygiene and safety practice.

Personal Protective Equipment

Eye/face Protection.

Tightly fitting safety goggles.

Respiratory Protection

Neoprene gloves. Long sleeved clothing. Chemical resistant apron. Antistatic boots.
Appropriate body protection should be selected based on activity and possible exposure.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear to Slightly cloudy and Colorless to Amber
Physical State	Liquid
Odor	Slight Alcohol to Pungent
Odor Threshold	No information available
pH	No information available
Flash Point	Approx. 11-25 °C / 52-77 °F (closed cup)
Autoignition Temperature	Estimated > 464 °C / 867 °F
Boiling point	Approx. 64.5 °C / 148.1 °F
Melting/Freezing Point	Estimated > -98 °C / -144 °F
Decomposition temperature	No information available
Oxidizing Properties	No information available
Flammability Limits in Air	Upper: 36% (Methanol) Lower: 3.3% (Ethanol)
Water Solubility	Miscible
Evaporation Rate	Approx. 2.1 (Butyl)
Vapor Pressure	Approx. 128 hPa @20°C
Vapor Density	1.1 (Air = 1.0)
Partition Coefficient (n-octanol/water)	No information available

10. STABILITY AND REACTIVITY

Reactivity	May react violently with very strong oxidising agents.
Stability	Stable under normal conditions.
Possibility of Hazardous Reactions	Hazardous polymerization does not occur.
Conditions to Avoid	Heat, flames and sparks. Incompatible products.
Incompatible Materials	Strong oxidizing agents. Alkali. Strong acids. Inorganic substances. Bromine pentafluoride. Ammonia. Peroxides. Perchlorates.
Hazardous Decomposition Products	Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO_2). Formaldehyde. Formic acid.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met. (Classification is based on available literature data for the significant mixture components). Ingestion, inhalation, or dermal absorption of even small amounts of methanol may result in methanol poisoning. The minimal lethal dose of methanol in humans has not been fully determined at this time. Due to the nature of the product constituents, sufficient data has not yet been identified to classify the mixture as a whole for acute toxicity. Appropriate care should be taken to avoid oral, dermal, and inhalation exposure. Ethanol significantly decreases the toxicity of methanol because it competes for the same metabolic enzymes, and has been used to treat methanol poisoning.

Chemical Name	Weight %	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methyl alcohol	65-97% (anhydrous basis)	5628 mg/kg Rat	15800 mg/kg Rabbit	64000 ppm Rat 4 h 83.2 mg/L Rat 4 h
2-Propanol	25% max. (anhydrous basis)	1870 mg/kg Rat	4059 mg/kg Rabbit	72600 mg/m3 Rat 4 h
Ethyl alcohol	20% max. (anhydrous basis)	7060 mg/kg Rat	> 5000 mg/kg	124.7 mg/l
1-Propanol	5% max. (anhydrous basis)	1870 mg/kg Rat		13548 ppm Rat 4 h

Skin corrosion/irritation	Based on available data, the classification criteria are not met. (Classification is based on available literature data).
Serious eye damage/eye irritation	Eye Dam. Cat. 1: Causes serious eye damage. (Classification is based on available literature data for the significant mixture components).
Respiratory or skin sensitization	Based on available data, the classification criteria are not met. (Classification is based on available literature data for the significant mixture components).
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, no evidence of carcinogenicity. NOTE: Ethanol is only classified as carcinogenic as ingested in alcoholic beverages.

Chemical Name	Weight %	OSHA	NTP	ACGIH	IARC
Ethyl alcohol	20% max. (anhydrous basis)	Present	Known	A3 - Confirmed Animal Carcinogen	Group 1 - Carcinogenic to Humans

Reproductive toxicity	The product, as a whole, is not considered to be a reproductive hazard according to the classification criteria of OSHA/GHS. Methanol is known to result in teratogenicity and embryo toxicity in animals, and is considered a WHMIS hazard at levels > 0.1%. ETHANOL: FERTILITY (for ethanol): NOAEL (oral, mouse) = 13.8g/kg (OECD416 equiv.)) NOAEC (inhalation, rat) >16,000ppm DEVELOPMENTAL TOXICITY (OECD414 equiv): NOAEL (oral) = 5.2g/kgbw/day NOAEC (inhalation) = 39mg/l. Source IUCLID chapter 7.8 summary In humans excessive consumption of alcoholic beverages during pregnancy is associated with the induction of Fetal Alcohol Syndrome in the offspring causing reduced birth weight and physical and mental defect to occur. There is no evidence that such effects might be caused by exposures other than direct ingestion of alcoholic drinks. Blood ethanol concentrations resulting from ethanol exposure by any route other than deliberate and repeated oral consumption are unlikely to reach levels associated with reproductive or developmental effects. From the available data, it can be concluded that it is impossible to reach the doses of ethanol required to produce any sort of adverse reproductive response other than by repeated oral consumption of large amounts of ethanol, doses normally only associated with problem drinking, and therefore classification for reproductive or developmental toxicity in the context of a chemical substance is not appropriate or warranted.
STOT - single exposure	STOT SE, Cat. 1. Affected organs: Optic nerve (nervus opticus), central nervous system. (Classification is based on available literature data for the significant mixture components).
STOT - repeated exposure	Based on available data, the classification criteria are not met. (Classification is based on available literature data for the significant mixture components).
Aspiration hazard	Based on available data, the classification criteria are not met. (Classification is based on available literature data for the significant mixture components).

Potential Health Effects

Effects	Risk of serious damage to eyes.
Eyes	May cause slight skin irritation.
Skin	
Inhalation	Inhalation of methanol can cause significant disturbance in vision, including blindness. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Inhalation of vapors in high concentration may cause irritation of respiratory system. In humans, ethanol is readily absorbed by the oral and inhalation routes, is distributed throughout all tissues and organs and is readily, metabolized and excreted.
Ingestion	May cause drowsiness and dizziness. Lack of coordination. Nausea. Vomiting. Abdominal pain. Unconsciousness. Ingestion may cause irritation to mucous membranes. Ingestion of methanol may be fatal or cause blindness.
Main Symptoms	Nausea. Vomiting. Dizziness. Drowsiness. Coma. Severe vision effects, including increased sensitivity to light, blurred vision, and blindness may develop following an 18-24 hour symptom-free period after ingestion.
Neurological Effects	Poison, may be fatal or cause blindness if swallowed. Substance may be absorbed through the skin which can contribute to damage to the optic nerve resulting in permanent vision changes, loss of vision, or total blindness.

12. ECOLOGICAL INFORMATION

Ecotoxicity

We have no quantitative data concerning the ecological effects of this product. Component-level values are listed below.

Chemical Name	Fresh Water Algae	Acute Fish Toxicity	Daphnia (Water flea)	Effects on micro-organisms	Other
Methyl alcohol		LC50: 96h 18-20ml/L (Oncorhynchus mykiss) static LC50: 96h 19500-20700mg/L (Oncorhynchus mykiss) flow-through			
2-Propanol	EC50: 96h 1000 mg/L (Desmodesmus subspicatus) EC50: 72h 1000 mg/L (Desmodesmus subspicatus)	LC50: 96h 9640mg/L (Pimephales promelas) flow-through LC50: 96h 11130mg/L (Pimephales promelas) static LC50: 96h 1400000µg/L (Lepomis macrochirus)	EC50: 48h 13299 mg/L (Daphnia magna)		
Ethyl alcohol	Chlorella vulgaris, 72hr: EC50 275mg/l, EC10 11.5mg/l; Selenastrum capricornutum, 72hr, EC50: 12.9g/l, EC10=0.44g/l; Chlamydomonas eugametos, 48hr, EC50: 18g/l, NOEC=7.9g/l	LC50 (96hr) Salmo gairdneri: 13g/l; Pimephales promelas: 13.5, 14.2 and 15.3g/l.	(48hr) Daphnia Magna: 12.34g/l; NOEC (reproduction, 21 days): >10mg/l. Ceriodaphnia dubia: EC50 (48hrs): 5.012g/l; NOEC (reproduction, 10 days): 9.6mg/l. Palaemonetes pugio NOEC (developmental, 10 days): 79mg/l.		
Propylene Glycol	EC50: 96h 19000 mg/L (Pseudokirchneriella subcapitata)	LC50: 96h 41-47ml/L (Oncorhynchus mykiss) static LC50: 96h 51400mg/L (Pimephales promelas) static LC50: 96h 51600mg/L (Oncorhynchus mykiss) static LC50: 96h 710mg/L (Pimephales promelas)	EC50: 48h 1000 mg/L (Daphnia magna) EC50: 24h 10000 mg/L (Daphnia magna)		
1-Propanol		LC50: 96h 4480mg/L (Pimephales promelas) flow-through	EC50: 48h 3642 mg/L (Daphnia magna) EC50: 48h 3339 - 3977 mg/L (Daphnia magna)		

Chemical Name	log Kow	BCF
Methyl alcohol	-0.77	
2-Propanol	0.05	
Ethyl alcohol	-0.32	
1-Propanol	0.25 - 0.34	

Persistence/Degradability	No information available.
Mobility	No information available

13. DISPOSAL CONSIDERATIONS

Whenever possible, as rules and regulations allow, please recycle or manage materials to minimize waste.

Waste Disposal Methods	Dispose of in compliance with the laws and regulations pertaining to this product in your jurisdiction. The classification and disposal method of waste material resulting from this product should be determined by the user at the time of disposal. Seek guidance from a qualified person or service within your local jurisdiction. Can be incinerated, when in compliance with local regulations.
Contaminated Packaging	Empty containers may contain hazardous residues. Do not cut, puncture or weld on or near to the container. Labels should not be removed from containers until they have been cleaned. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers.

14. TRANSPORT INFORMATION

Domestic transport regulations (USA)

DOT	
DOT Shipping Description	UN1987 Alcohols, n.o.s (Methyl alcohol, Ethyl alcohol), 3, II, RQ
UN-No	UN1987
Proper Shipping Name	Alcohols, n.o.s.
Hazard Class	3
Packing Group	II
Reportable Quantity (RQ)	Methanol: RQ kg= 2670.59
Special Provisions	172, IB2, T7,TP1, TP8, TP28
Transport Symbol(s)	

Domestic transport regulations (Canada)

TDG	
UN-No	UN1986
Proper Shipping Name	Alcohols, flammable, toxic, n.o.s (Methyl alcohol)
Hazard Class	3
Subsidiary Class	6.1
Packing Group	II

Domestic transport regulations (Mexico)

MEX	
UN-No	UN1986
Proper Shipping Name	Alcohols, flammable, toxic, n.o.s.
Hazard Class	3
Subsidiary Class	6.1
Packing Group	II

International transport regulations

ICAO	
UN-No	UN1986
Proper Shipping Name	Alcohols, flammable, toxic, n.o.s.
Hazard Class	3
Subsidiary Class	6.1
Packing Group	II
IATA	
UN-No	UN1986
Proper Shipping Name	Alcohols, flammable, toxic, n.o.s.
Hazard Class	3
Subsidiary Class	6.1
Packing Group	II
ERG Code	3HP
IMDG/IMO	
UN-No	UN1986
Proper Shipping Name	Alcohols, flammable, toxic, n.o.s.
Hazard Class	3
Subsidiary Class	6.1
Packing Group	II
EmS No.	F-E, S-D

15. REGULATORY INFORMATION

International Inventories

The components of this product are reported in the following inventories:

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	AICS	ENCS ISHL	CHINA	PICCS	KECL	NZIoC
Methyl alcohol	Yes	Yes	No	Yes 200-659-6	No	Yes	Yes 2-201	Yes	Yes	Yes KE-23193	Yes
2-Propanol	Yes	Yes	Yes	Yes 200-661-7	No	Yes	Yes Present	Yes	Yes	Yes Present	Yes
Ethyl alcohol	Yes	Yes	No	Yes 200-578-6	No	Yes	Yes 2-202	Yes	Yes	Yes KE-13217	Yes
Propylene Glycol	Yes	Yes Present Yes	No	Yes 200-338-0	No	Yes	Yes (2)-234 2-(8)-321 2-(8)-323	Yes	Yes	Yes KE-29267	Yes
1-Propanol	Yes	Yes	Yes	Yes 200-746-9	No	Yes	Yes Present	Yes	Yes	Yes Present	Yes

USA

Federal Regulations

Ozone Depleting Substances:

No Class I or Class II material is known to be used in the manufacture of, or contained in, this product.

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 CFR 372. In order to comply with SARA 313, Emission Reporting, facilities are required to complete a Toxic Chemical Release Inventory Form (Form R) for specified chemicals.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold limits
Methyl alcohol	67-56-1	65-97% (anhydrous basis)	1.0% de minimis concentration
2-Propanol	67-63-0	25% max. (anhydrous basis)	1.0% de minimis concentration

CERCLA/SARA 103-302

Sections 103-302 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 CFR 103-302 In order to comply with EPCRA 304, Hazardous Substances and their Reportable Quantities, spills or discharges into the environment of a hazardous substance in a quantity equal to or exceeding the RQ within any 24-hour period, must immediately be reported to the National Response Center (Phone: 800-424-8802).

Chemical Name	CAS-No	Weight %	RQ	TPQ
Methyl alcohol	67-56-1	65-97% (anhydrous basis)	5000 lb / 2270 kg	

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 63)

This product is known to contain the following HAPs:

Chemical Name	CAS-No	Weight %	HAPS
Methyl alcohol	67-56-1	65-97% (anhydrous basis)	Present

State Regulations

California Proposition 65

Chemical Name	CAS-No	Weight %	Category
Methyl alcohol	67-56-1	65-97% (anhydrous basis)	Developmental
Ethyl alcohol	64-17-5	20% max. (anhydrous basis)	Developmental

- *Ethanol is only considered a Prop 65 chemical as "ethyl alcohol IN alcoholic beverages" and not as used in fuel or industrial applications*

State Right-to-Know

Component Information.

Chemical Name	Weight %	Massachusetts	Minnesota	New Jersey	Pennsylvania
Methyl alcohol	65-97% (anhydrous basis)	Yes	Yes	Yes 1222	Yes Environmental hazard
2-Propanol	25% max. (anhydrous basis)	Yes	No	Yes 1076	Yes Special hazardous substance
Ethyl alcohol	20% max. (anhydrous basis)	Yes	No	Yes 0844	Yes
Propylene Glycol	10% max.	No	No	Yes 3595	Yes
1-Propanol	5% max. (anhydrous basis)	Yes	No	Yes 1605	Yes

Canada

WHMIS Product Classification

B2 - Flammable liquid. D2B - Materials causing other toxic effects, toxic material.

WHMIS Ingredient Disclosure List IDL

Component Information

Chemical Name	Weight %	WHMIS IDL	WHMIS Threshold limits
Methyl alcohol	65-97% (anhydrous basis)	Listed	0.1%
2-Propanol	25% max. (anhydrous basis)	Listed	1%
Ethyl alcohol	20% max. (anhydrous basis)	Listed	0.1%
Propylene Glycol	10% max.	Listed	1%
1-Propanol	5% max. (anhydrous basis)	Listed	1%

(NPRI) Canadian National Pollutant Release Inventory

Component Information

Chemical Name	Weight %	NPRI
Methyl alcohol	65-97% (anhydrous basis)	Part 1, Group A Substance; Part 5, Individual Substances; Part 4 Substance
2-Propanol	25% max. (anhydrous basis)	Part 4 Substance as set out in Section 65 of the List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999
Ethyl alcohol	20% max. (anhydrous basis)	Part 5, Individual Substances Part 4 Substance
Propylene Glycol	10% max.	Part 4 Substance as set out in Section 65 of the List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999
1-Propanol	5% max. (anhydrous basis)	Part 4 Substance as set out in Section 65 of the List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Mexico

Mexico – Grade Serious risk, Grade 3

16. OTHER INFORMATION

Prepared By:	Environmental Operating Solutions, Inc.
Preparation Date:	28-December-2016
Revision Date:	9-February-2018

The information provided on this (M)SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of sheet

STATE OF COLORADO

Russell - DNR, Elliott <elliott.russell@state.co.us>

Fwd: CDPHE Spills Tracking System Data Entry Form 2018-0350

Russ Means - DNR <russ.means@state.co.us> Tue, Jul 24, 2018 at 9:41 AM
To: Elliott Russell - DNR <elliott.russell@state.co.us>

here you go
Russ Means
Minerals Program Director
Division of Reclamation, Mining and Safety

COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

P: 303.866.3567. Ext 8150
Main Office and Mail: 1313 Sherman St., Room 215, Denver, CO 80203
Field Office Location: 101 S. 3rd St., Suite 301, Grand Junction, CO 81501
russ.means@state.co.us / http://mining.state.co.us

---------- Forwarded message ---------
From: **Nedrow - CDPHE, Ann** <ann.nedrow@state.co.us>
Date: Tue, Jul 17, 2018 at 9:21 AM
Subject: CDPHE Spills Tracking System Data Entry Form 2018-0350
To: Michelle Thiebaud <michelle.thiebaud@state.co.us>, David Kurz <david.kurz@state.co.us>, Jorge Delgado <jorge.a.delgado@state.co.us>, Cameron Wilkins <cameron.wilkins@state.co.us>, Jacques, Kelly <kelly.jacques@state.co.us>, AnneMarie Goolsby <annemarie.goolsby@state.co.us>, Morgan, Kelly <kelly.morgan@state.co.us>, russ.means <russ.means@state.co.us>, Wally Erickson - DNR <wally.erickson@state.co.us>, Melynda May - DNR <melynda.may@state.co.us>, Jeff Spohn - DNR <jeff.spohn@state.co.us>, Josh Nehring - DNR <josh.nehring@state.co.us>, Tyler Swarr - DNR <tyler.swarr@state.co.us>, Michael Atwood - DNR <michael.atwood@state.co.us>, Mark Lamb - DNR <mark.lamb@state.co.us>, Jim Aragon - DNR <jimb.aragon@state.co.us>, teisenman@parkco.us <teisenman@parkco.us>, Tyler Stoltzfus - DNR <tyler.stoltzfus@state.co.us>
Cc: Stasinos, Greg <greg.stasinos@state.co.us>, Ann Nedrow <Ann.Nedrow@state.co.us>, Dan Miller <dan.miller@coag.gov>, Darcie Bentz - CDPHE <darcie.bentz@state.co.us>, David Banas <David.Banas@coag.gov>, Garry DeJong - CDPHE <garry.dejong@state.co.us>, Jennifer Robbins <Jennifer.Robbins@coag.gov>, Juliann Bertone - CDPHE <juliann.bertone@state.co.us>, Troy Arnold <troy.arnold@coag.gov>, Christe Coleman <christe.coleman@state.co.us>, Cory Stark - CDPS <cory.stark@state.co.us>, david.osborn <david.osborn@state.co.us>, drew. petersen <drew.petersen@state.co.us>, Kevin Kuretich <kevin.kuretich@state.co.us>, Mark Boley - CDPS <mark.boley@state.co.us>, Riley Frazee - CDPS <riley.frazee@state.co.us>, Trevor Denney - CDPS <trevor.denney@state.co.us>, Vale Chuck Mr. <Chuck.Vale@state.co.us>, R8 RRC <R8_RRC@epa.gov>

Attached is a report for Park County of a release of methyl alcohol with a small amount of butanediol into Mosquito Creek thought due to a burst pump head. The pump head was replaced and the release should be stopped. The caller is en route to personally assess the situation. SDS is attached to this email.

Thank you,
Ann

--
Ann Nedrow

Daytime Coordinator, Emergency and Incident Reporting Line
Office of Emergency Preparedness and Response

P 303.692.2709 | F 303.691.7811 |
4300 Cherry Creek Drive South, C-2, Denver, CO 80246
Ann.Nedrow@State.Co.Us | www.colorado.gov/

24-hour Colorado Emergency and Incident Reporting Line: 1-877-518-5608

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2 attachments

CDPHE Spills Tracking System Data Entry Form 2018-0350.pdf
30K

SDS for London Mine release methyl alcohol.pdf
1451K