

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name: Crown Denatured Alcohol

SDS number: CR.DA

Synonym(s): Denatured methanol

1.2 Relevant identified uses of the substance or mixture and uses advised against

General use: Glass cleaner

Uses advised against: None known

1.3 Details of the supplier and of the safety data sheet

Manufacturer/Distributor

Packaging Service Co., Inc.

1904 Mykawa Road

Pearland, TX 77581-3210 USA

1-281-485-1458

1.4 Emergency telephone number

CHEMTREC: 1-800-424-9300 (USA)

CANUTEC: 1-613-996-6666 (Canada)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable Liquid - Category 2 [H225]

Acute Toxicity, Oral - Category 3 [H301]

Acute Toxicity, Dermal - Category 3 [H311]

Acute Toxicity, Inhalation - Category 3 [H331]

Specific Target Organ Toxicity, Single Exposure - Category 1 (STOT SE 1) [H370]

2.2 Label elements

Hazard symbol(s):



GHS02



GHS06



GHS08

Signal word:

Danger

Hazard statement(s):

H225 - Highly flammable liquid and vapor

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H331 - Toxic if inhaled

H370 - Causes damage to organs: eyes, skin, respiratory system, central nervous system

Precautionary statements:

[Prevention]

P210 - Keep away from heat, sparks, open flames and hot surfaces. No smoking.

P233 - Keep container tightly closed.

P240 - Ground and bond container and receiving equipment.

P241 + P242 - Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P260 - Do not breathe fumes, mist or vapor.

P280 - Wear protective gloves, protective clothing and eye protection.

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

[Response]

P370 + P378 - In case of fire: Use water fog, foam, dry chemical or carbon dioxide for extinction.

P303 + P361 + P353 - IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water or shower.

P363 - Wash contaminated clothing before reuse.

P301 + P330 + P310 - IF SWALLOWED: Rinse mouth. Immediately call a POISON CENTER or doctor.

P321 - Specific treatment: Contact a POISON CENTER or doctor. Refer to Section 4 of this SDS.

P304 + P340 + P311 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor.

[Storage]

P405 + P403 + P233 + P235 - Store locked up in a well-ventilated place. Keep container tightly closed. Keep cool.

[Disposal]

P501 - Dispose of contents in accordance with national and local regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Repeated exposure may cause skin dryness or cracking.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

% by Weight	Ingredient	CAS Number	EC Number	Annex Number	GHS Classification
65 - 85	Methanol	67-56-1	200-659-6	603-001-00-X	H225, H301, H311, H331, H370
20 - 30	Ethanol	64-17-5	200-587-6	603-002-00-8	H225
0.5 - 3.0	Isopropanol	67-63-0	200-661-7	603-117-00-0	H225, H319, H336
0.1 - 1.0	Methyl Isobutyl Ketone	108-10-1	203-550-1	606-004-00-4	H225, H319, H332, H336

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identify and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with the applicable provisions of paragraph (i).

There are no additional ingredients present in this product which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product mist or vapor causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. If unconscious, maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If irritation persists or if the victim feels unwell, seek medical attention.

Eyes: Immediately flush eyes with large amounts of water or saline solution for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses, if present and easy to do, after first 2 minutes and continue rinsing. If irritation persists seek medical attention, preferably from an ophthalmologist.

Skin: Flush skin with large amounts of water while removing contaminated clothing. Wash the affected area with soap and water followed by thorough rinsing. Wash contaminated clothing and shoes before reuse. If irritation persists, seek medical attention.

Ingestion: Rinse mouth with water if the victim is conscious. Remove dentures if present. DO NOT induce vomiting unless directed to do so by medical personnel. Vomiting may occur spontaneously. To prevent aspiration of material into the lungs, lay the victim on one side with the head lower than the waist. Never give anything by mouth to an unconscious or convulsing person. Do not leave the victim unattended. Seek immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

Eyes: Causes serious eye irritation with inflammation, swelling, pain and tearing. Risk of corneal clouding or corneal injury. May cause painful sensitization to light. Continued exposure may cause lesions. Vapor or mist can cause eye irritation.

Skin: May cause skin irritation with localized redness, itching and discomfort. Prolonged contact with unprotected skin may cause defatting of the skin and dermatitis. Toxic if absorbed through the skin.

Inhalation: Irritating to mucous membranes and to the respiratory system. Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, drowsiness, dizziness, unconsciousness and coma. May cause impaired vision and affect the optic nerve. May cause narcotic effects in high concentration. Toxic if inhaled. Prolonged and repeated inhalation of vapors and mist may cause damage to the liver and kidneys. May damage fertility and the unborn child.

Ingestion: May cause irritation of the digestive tract with nausea, vomiting, abdominal pain and diarrhea. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause liver and kidney damage. Ingestion of significant amounts of ketones may cause respiratory depression. Toxic if swallowed.

Chronic: Prolonged or repeated skin contact may cause defatting of the skin and dermatitis or aggravate existing skin conditions. Chronic exposure may cause damage to the liver, kidneys and heart and impair central nervous system function. Chronic exposures may cause reproductive disorders and teratogenic effects. Isopropanol and Methyl Isobutyl Ketone are possible human carcinogen. Refer to Section 11.2.

4.3 Indication of any immediate medical attention and special treatment needed

Advice to doctor and hospital personnel

Effects may be delayed. Treat symptomatically and supportively.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishable media

Suitable methods of extinction: Use extinguishing media such as water spray or fog, carbon dioxide, foam and dry chemical.

Unsuitable methods of extinction: Water jets or streams may spread the fire.

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapor! Vapors are heavier than air and can travel along the ground to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Exposure to ignition sources (e.g cell phones) can ignite vapors, causing a flash fire. Closed containers may explode due to the buildup of pressure when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed. Obtain medical attention.

Explosion hazards: Avoid sources of ignition. Vapors may form an explosive mixture with air, especially in confined spaces. Ground and bond containers in storage and when container is in use.

5.3 Advice for firefighters

Firefighters should wear full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. Be aware that burning liquid will float on water. Firefighters must control runoff to prevent environmental contamination. Notify appropriate authorities of potential fire and explosion hazard if liquid enters sewers or waterways.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate non-essential personnel. Wear appropriate protective clothing and equipment designated in Section 8.2. Ventilate the area. Remove all sources of ignition. NO SMOKING. Clean up spills immediately. Spills create a slip hazard.

6.2 Environmental precautions

Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers or waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements.

6.3 Methods and materials for containment and cleaning up

Approach spill from upwind direction. Cover drains and contain spill. Cover spill with a large quantity of inert absorbent. Do not use combustible material such as sawdust. Collect material using non-sparking tools and place into an approved container for proper disposal. Observe possible material restrictions (Sections 7.2 and 10.5). Do not allow material or runoff from rinsing contaminated areas to enter floor drains or storm drains and ditches that lead to waterways. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

For indications about waste treatment, see Section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling

Wear all appropriate personal protective equipment specified in Section 8.2. Do not get in eyes or on skin or clothing. Do not inhale mist or vapor. NO SMOKING. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear an appropriate respirator. Open containers slowly to control possible pressure release. Wash contaminated clothing and shoes thoroughly before reuse.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Vapors are heavier than air and can travel along the ground to a source of ignition and flash back.

7.2 Conditions for safe storage, including any incompatibilities

Store in dry, cool, well-ventilated areas away from incompatible materials (see Section 10.5), food and drink. Keep away from heat and ignition sources. Transfer only to approved containers having correct labeling. Keep containers tightly closed when not in use. Protect containers against physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Containers are hazardous when empty as they contain product residues. Do not cut, drill, weld, braze, solder grind or perform similar operations on or near empty containers. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Do not take internally. Keep out of reach of children.

7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limit values

CAS Number	Ingredient	OSHA PEL	ACGIH TLV	NIOSH
67-56-1	Methanol	200 ppm; 260 mg/m ³ TWA	200 ppm; 262 mg/m ³ TWA 200 ppm; 328 mg/m ³ STEL Skin	200 ppm; 260 mg/m ³ TWA 250 ppm; 325 mg/m ³ STEL 6,000 ppm IDLH (LEL); Skin
64-17-5	Ethanol	1,000 ppm; 1,900 mg/m ³ TWA	1,000 ppm; 1,880 mg/m ³ TWA	1,000 ppm; 1,900 mg/m ³ TWA 3,300 ppm IDLH
67-63-0	Isopropanol	400 ppm; 980 mg/m ³ TWA	400 ppm; 941 mg/m ³ TWA 400 ppm; 984 mg/m ³ STEL	400 ppm; 980 mg/m ³ TWA
108-10-1	Methyl Isobutyl Ketone	100 ppm; 410 mg/m ³	20 ppm TWA 75 ppm STEL	50 ppm; 205 mg/m ³ TWA 5,000 ppm IDLH

A "skin" notation following the inhalation exposure guideline refers to the potential for dermal absorption of the material, including eyes and mucous membranes, either by direct contact with vapors or by direct skin contact. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposure should be considered.

8.2 Exposure controls

Engineering measures: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to Section 7.1.

Individual protection measures: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

Hygiene measures: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Wash contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking, smoking or using the lavatory.

Eye/face protection: Wear safety glasses with unperforated side shields or protective splash goggles during use.

Hand protection: Wear Nitrile gloves or gloves recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

Skin protection: Wear protective clothing. Wear protective boots if the situation requires.

Respiratory protection: Always use an approved respirator when vapor/aerosols are generated. Where risk assessment shows air-purifying respirators are appropriate use a half-mask respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Environmental exposure controls: Do not empty into drains.

PPE must not be considered a long-term solution to exposure control. PPE usage must be accompanied by employer programs to properly select, maintain, clean fit and use. Consult a competent industrial hygiene resource to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.



SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear, colorless liquid
Odor	Alcoholic
Odor Threshold	No data available
Molecular Weight	Not applicable
Chemical Formula	Not applicable
pH	No data available
Freezing/Melting Point	No data available
Boiling Point Range	64.5 -116 °C (148 - 241 °F)
Evaporation Rate	No data available
Flammability (solid, gas)	Not applicable
Flash Point Range	11 °C (51.8 °F) [estimated]
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Lower Explosive Limit (LEL)	No data available
Upper Explosive Limit (UEL)	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	No data available
Density	0.7875 - 0.7975 g/ml (6.57 - 6.66 lb/gal) [calculated]
Viscosity	No data available
Solubility in Water	No data available
Partition Coefficient: n-octanol/water	No data available
Oxidizing Properties	Not applicable
Explosive Properties	Not applicable
Volatiles by Weight @ 21 °C	100%

9.2 Other data

Flammability Classification	IB
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SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

Under normal conditions of storage and use, hazardous reactions will not occur.

10.2 Chemical stability

Stable under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions

Vapors may form explosive mixture with air. May react exothermically with some incompatible materials.

Hazardous polymerization will not occur.

10.4 Conditions to avoid

High temperatures, sources of ignition, hot surfaces, contact with incompatible materials. Avoid use in confined areas.

10.5 Incompatible materials

Strong oxidizing agents, strong mineral and organic acids, strong bases, halogenated hydrocarbons

May be corrosive to lead, aluminum, magnesium and platinum.

10.6 Hazardous decomposition products

Thermal decomposition products include oxides of carbon.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity

LD₅₀, rat - 1,517 - 3,300 mg/kg [calculated]

LD_{LO}, Human: 193.5 mg/kg [methanol, calculated]

Acute inhalation toxicity

LC₅₀, rat - 93.6 mg/l, 4 h [calculated]

Acute dermal toxicity

LD₅₀, rabbit - >5,000 mg/kg [calculated]

Skin irritation

Causes skin irritation.

Eye irritation

Causes serious eye irritation.

Sensitization

No data available

Genotoxicity in vitro

No data available

Mutagenicity

No data available

Specific organ toxicity - single exposure

May be irritating to the respiratory tract. May cause drowsiness or dizziness.

Specific organ toxicity - repeated exposure

Causes damage to the central nervous system, respiratory system, liver, kidneys eyes and skin through prolonged and repeated use.

Aspiration hazard

No data available

11.2 Further information

Methanol is slowly eliminated from the body; therefore, it can have cumulative toxicity effects with repeated exposures. Methanol when ingested is metabolized first to formaldehyde and then to formic acid or formate salts. These are poisonous to the central nervous system and may result in blindness, coma and death. May cause liver disorders (e.g. edema, proteinuria) and damage. Significant exposure to methanol may adversely affect people with chronic disease of the respiratory system, central nervous system, kidneys, liver, skin and/or eyes.

Methanol is a potential hazard to the fetus. Developmental effects have been observed in the offspring of rats and mice exposed to methanol by inhalation. These included skeletal, cardiovascular, urinary system and central nervous system (CNS) malformations in rats and increased resorptions and skeletal and CNS malformations in mice.

Ethanol (CAS #64-17-5): Carcinogen classifications of IARC, ACGIH, NTP, OSHA and California Proposition 65 apply to *beverage use only*.

This product is NOT intended for this use. Ethanol has been shown to product fetotoxicity in the embryo or fetus of laboratory animals. Prenatal exposure to ethanol is associated with congenital malformations that have collectively been termed "fetal alcohol syndrome". This applies to *beverage use only*.

Isopropanol (CAS #67-63-0): IARC, Group 3 carcinogen - *Not classifiable as to its carcinogenicity to humans*. Not listed as a carcinogen by ACGIH, NTP or OSHA.

Methyl Isobutyl Ketone (CAS #108-10-1): IARC Group 2B carcinogen - *Possibly carcinogenic to humans*. ACGIH A3 carcinogen - *animal carcinogen with unknown relevance to humans*. Kidney effects and/or tumors have been observed in male rats. This substance has been toxic to the fetus in laboratory animals at doses toxic to the mother. It did not cause birth defects in test animals.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

The ecotoxicity of this product has not been evaluated. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on aquatic life and the environment.

12.2 Persistence and degradability

This product is readily biodegradable.

12.3 Bioaccumulation potential

This product will not bioaccumulate.

12.4 Mobility in soil

Mobility in soil is high and may cause contamination of ground water.

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

Additional ecological information

Do not allow material to run into surface waters, wastewater or soil.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Methods of disposal: The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

RCRA F-Series: No listings above the reportable threshold (de minimis)

RCRA U-Series: Methanol (CAS #67-56-1), U154 Methyl Isobutyl Ketone (CAS #108-10-1), U161

SECTION 14 - TRANSPORT INFORMATION

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

Non-regulated for flammable liquids Packing Group II when inner packagings are not over 1.0 liters (0.3 gallons) net capacity each, packed in a strong outer packaging.

USA DOT (Ground Transportation) - Bulk and Non-bulk

Drum Label(s)

Proper Shipping Name: Alcohols, n.o.s. (Methanol, Ethanol)
Hazard Class: 3
UN/NA: UN1987
Packing Group: II
NAERG: Guide #127
Packaging Authorization: Non-Bulk: 49 CFR 173.202; Bulk: 173.242
Packaging Exceptions: 49 CFR 173.150



IMO/IMDG (Water Transportation)

Proper Shipping Name: Alcohols, flammable, toxic n.o.s. (Methanol, Ethanol)
Hazard Class: 3 (6.1)
UN/NA: UN1986
Packing Group: II
Marine Pollutant: No
EMS Number: F-E, S-D

ICAO/IATA (Air Transportation)

Proper Shipping Name: Alcohols, flammable toxic, n.o.s. (Methanol, Ethanol)
Hazard Class: 3 (6.1)
UN/NA: UN1986
Packing Group: II
Quantity Limitations: 49 CFR 175.27 and 175.75 - Cargo Aircraft Only: 60 l; Passenger Aircraft: 1 l

RID/ADR (Rail Transportation)

Proper Shipping Name: Alcohols, n.o.s. (Methanol, Ethanol)
Hazard Class: 3
UN/NA: UN1987
Packing Group: II

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

U. S. Federal Regulations

OSHA Hazard Communication Standard: This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200.

OSHA Process Safety Management Standard: This product is not regulated under OSHA PSM Standard 29 CFR 1910.119.

EPA Risk Management Planning Standard: This product is not regulated under EPA RMP Standard (RMP) 40 CFR Part 68.

EPA Federal Insecticide, Fungicide and Rodenticide Act: This product is not a registered Pesticide under the FIFRA, 40 CFR Part 150.

Toxic Substance Control Act (TSCA) Inventory: All of the substances in this product are listed on the TSCA Inventory. This product is not subject to TSCA 12(b) Export Notification.

Drug Enforcement Administration (DEA) List 2, Essential Chemicals (21 CFR 1310.02(b)) and 1310.4(f)(2)) and Chemical Code Number
No listings

Drug Enforcement Administration (DEA) Lists 1 & 2, Exempt Chemical Mixtures (21 CFR 1310.12(c)) and Code Number

Methyl Isobutyl Ketone (CAS #108-10-1): List 2, DEA Chemical code 6594; 35% by Weight or Volume; exports only; limit applies to methyl isobutyl ketone or any combination of acetone, ethyl ether, 2-butanone, methyl isobutyl ketone, and toluene if present in the mixture by summing the concentrations for each chemical.

Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) Chemicals

No listings

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: Fire Hazard, Acute Health Hazard, Chronic Health Hazard

SARA 313 Information: Methanol, Isopropanol and Methyl Isobutyl Ketone are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance: No components of the product exceed the threshold (de minimis) reporting levels established by these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification: No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): This product contains the following CERCLA reportable substances: Methanol (CAS #67-56-1): RQ -2,268 kg (5,000 lbs) Methyl Isobutyl Ketone (CAS #108-10-1): RQ = 2,268 kg (5,000 lbs)

Clean Air Act (CAA)

Methanol and Methyl Isobutyl Ketone are listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain any Class 1 Ozone depletors.

This product does not contain any Class 2 Ozone depletors.

Clean Water Act (CWA)

Methyl Isobutyl Ketone (CAS #108-10-1) is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

Methanol (CAS #67-56-1) is known to the state of California to cause reproductive harm (developmental).

Methyl Isobutyl Ketone is known to the state of California to cause cancer.

Carcinogen classification for Ethanol (CAS #64-17-5) applies to *beverage use only*. This product is NOT intended for this use.

Other U.S. State Inventories

Methanol (CAS #67-56-1) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ID, IL, ME, MA, MN, NJ, NY, NC, PA, RI, WA.

Ethanol (CAS #64-17-5) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, ID, MA, MN, NJ, PA, WA.

Isopropanol (CAS #67-63-0) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ID, ME, MA, MN, NJ, NY, PA, RI, WA, WI.

Methyl Isobutyl Ketone (CAS #108-10-1) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ID, IL, MA, MN, NJ, NY, PA, RI, WI, WV.

Canada

WHMIS Hazard Classification

Highly flammable liquid and vapor May cause drowsiness or dizziness
 Toxic if swallowed May damage fertility or the unborn child
 Causes serious eye irritation May cause damage to organs

Canadian National Pollutant Release Inventory (NPRI): Methanol, Isopropanol and Methyl Isobutyl Ketone are listed on the NPRI.

European Economic Community

WGK, Germany (Water danger/protection): 1 (low hazard to waters)

Global Chemical Inventory Lists

Country	Inventory Name	Inventory Listing*
Canada	Domestic Substance List (DSL)	Yes
Canada	Non-Domestic Substance List (NDSL)	No
Europe	Inventory of New and Existing Chemicals (EINECS)	Yes
United States	Toxic Substance Control Act (TSCA)	Yes
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (KECL)	Yes
Philippines	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

*Yes - All components of this product are in compliance with the inventory requirements administered by the governing country.

No - One or more components of this product are not on the inventory or are exempt from listing.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16 - OTHER INFORMATION

Hazardous Material Information System (HMIS)

Health	* 2
Flammability	3
Physical Hazard	0
Personal Protection	C

C = safety glasses, gloves and an apron

HMIS Hazard Rating Legend

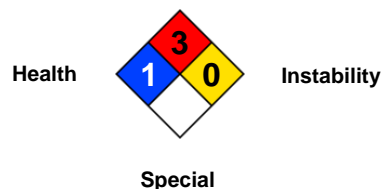
0 = Minimal 1 = Slight 2 = Moderate 3 = Serious
 4 = Severe * = Chronic Health Hazard

NFPA Hazard Rating Legend

0 = Insignificant 1 = Slight 2 = Moderate
 3 = High 4 = Extreme

National Fire Protection Association (NFPA)

Flammability



Full Text of GHS Hazard Phrases Referenced in Section 3 (not covered in Section 2)

H319 - Causes serious eye damage H336 - May cause drowsiness or dizziness
 H332 - Harmful if inhaled

Abbreviation Key

ACGIH	American Conference of Governmental Industrial Hygienists	mppcf	Millions of Particles Per Cubic Foot
ADR	Accord Dangereux Routier (European regulations concerning the international transport of dangerous by road)	NA	North America
CAS	Chemical Abstract Services	NAERG	North American Emergency Response Guide Book
CFR	Code of Federal Regulations	NIOSH	National Institute for Occupational Safety
DOT	Department of Transportation	NTP	National Toxicology Program
EMS Guide	Emergency Response Procedures for Ships Carrying Dangerous Goods	OSHA	Occupational Safety and Health Administration
EPA	Environmental Protection Agency	PBT	Persistent, Bioaccumulating and Toxic
ERG	Emergency Response Guide Book	PEL	Permissible Exposure Limit
FDA	Food and Drug Administration	PMCC	Pensky-Martens Closed Cup
GHS	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)	ppm	Parts Per Million
HCS	Hazard Communication Standard	RCRA	Resource Conservation and Recovery Act
IARC	International Agency for Research on Cancer	RID	Dangerous Goods by Rail
IATA	International Air Transport Association	RQ	Reportable Quantity
ICAO	International Civil Aviation Organization	TCC/Tag	Tagliabue Closed Cup
IDLH	Immediately Dangerous to Life and Health	TLV	Threshold Limit Value
IMDG	International Maritime Dangerous Goods	TSCA	Toxic Substance Control Act
IMO	International Maritime Organization	TWA	Time-Weighted Average
		UN	United Nations
		VOC	Volatile Organic Compounds
		vPvB	Very Persistent and Very Bioaccumulating
		WHMIS	Workplace Hazardous Materials Information System

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