

+1.703.527.3887 (INT)

SAFETY DATA SHEET

Solv KK006, 190 Proof

This SDS is valid for all grades and catalog #'s

1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

Product Identifier: Synonyms: Denatured Ethanol Denatured Ethanol, Industrial Alcohol; Special Industrial Solvent Formula KK006, 190 Proof; Ethanol denatured with Methanol, Isopropyl Alcohol, and MIBK Not available

Other means of identification:

Recommended use of the chemical and restrictions on use:

Special industrial solvents are intended for use as ingredients or solvents in manufacturing processes and shall not be distributed through retail channels for sale as consumer commodities for personal or household use. When a special industrial solvent is used in the manufacture of an article for sale, sufficient ingredients shall be added to definitely change the composition and character of the special industrial solvent. A special industrial solvent shall not be reprocessed into another solvent intended for sale if the other solvent would contain more than 50% alcohol by volume.

Supplier Details:

Greenfield Global USA, Inc. 1101 Isaac Shelby Drive, Shelbyville, KY 40065, USA. Tel: 502.232.7600 Fax: 502.633.6100 CCN17213 **Greenfield Global USA, Inc.** 58 Vale Road, Brookfield, CT 06804, USA. Tel: 203.740.3471 Fax: 203.740.3481

Emergency Contact:

CHEMTREC: 1.800.424.9300 (USA) / +1.703.527.3887 (International)

2. HAZARDS IDENTIFICATION

Emergency Overview:

This material is considered hazardous in accordance to OSHA hazardous Communication guidelines. Material is flammable and can burn with little to no visible flame.

CCN17213

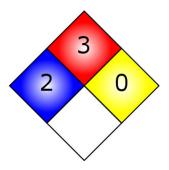
OSHA Hazards:

Flammable liquid, Target Organ Effect, Irritant, Toxic by inhalation, Toxic by ingestion, Toxic by skin absorption

Target Organs:

Cardiovascular system, Central nervous system, Eyes, Gastrointestinal tract, Kidney, Liver





GHS label elements, including precautionary statements



Signal Word: DANGER!

Hazard statement(s)		
H225	Highly flammable liquid and vapor.	
H302	Harmful if swallowed.	
H315	Causes skin irritation.	
H319	Causes serious eye irritation.	
H335	May cause respiratory irritation.	
H336	May cause drowsiness or dizziness.	
H370	May cause damage to organs.	
Precautionary statement(s)		

P210	Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating, and lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves and eye and face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Remove immediately all contaminated clothing.
	Rinse skin with water.

SDS: 992 Revision Date: 09.16.15 Revision Number: 4.0



P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for saverabors are saverable to the same of the sa
	contact lenses, if present and easy to do. Continue rinsing. Seek
	medical attention.
P337 + P313	If eye irritation persists: Get medical attention.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for
	extinction.
P403 + P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents and container to an approved waste disposal plant.

GHS Classification(s)

Acute toxicity, Oral (Category 4) Eye irritation (Category 2A) Flammable Liquids (Category 2) Skin irritation (Category 2) Specific target organ toxicity - single exposure (Category 1) Specific target organ toxicity - single exposure (Category 3)

Other hazards which do not result in classification:

Potential Health Effects:

Organ	Description
Eyes	Can cause eye irritation such as stinging, tearing, and redness.
Ingestion	Ingestion can cause dizziness, faintness, drowsiness decreased awareness or responsiveness, nausea, vomiting, staggering gait, lack of coordination, coma and death.
Inhalation	High vapor concentration can cause burning sensation in nose and throat and stinging and watering in the eyes. At concentrations which amount to irritation, dizziness, faintness, drowsiness, nausea and vomiting can also occur.
Skin	Can cause irritation to the skin. Prolonged or repeated contact may cause defatting and drying of the skin.
Chronic	Long term repeated oral exposure to ethanol may result in the development of progressive liver injury with fibrosis. Overexposure to methanol may cause eye damage and liver or kidney injury.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical identity: Common name / Synonym:

SOLV KK006, 190 PROOF Denatured Ethanol, Industrial Alcohol; Special Industrial Solvent Formula KK006, 190 Proof; Ethanol denatured with Methanol, Isopropyl Alcohol, and MIBK 1987

UN #:

% Volume	Material	CAS
81.51	Ethanol	64-17-5
9.01	Isopropyl Alcohol	67-63-0
4.29	Methanol	67-56-1

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0.90	Methyl Isobutyl Ketone	+1.703.527.3887 (INT)
4.29	Water	7732-18-5

4. FIRST AID MEASURES

General advice

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Skin

Wash skin with soap and copious amounts of water. Seek medical attention.

Inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Eyes

Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical attention.

Ingestion

DO NOT induce vomiting. If vomiting does occur, have victim lean forward to prevent aspiration. Rinse mouth with water. Seek medical attention. Never give anything by mouth to an unconscious individual.

Note to Physician

Symptoms vary with alcohol level of the blood. Mild alcohol intoxication occurs at blood levels between 0.05-0.15 %. Approximately 25% of individuals show signs of intoxication at these levels. Above 0.15% the person is definitely under the influence of ethanol; 50-95% of individuals are clinically intoxicated at these levels. Severe poisoning occurs when the blood is ethanol level is 0.3-0.5%. Above 0.5% the individual will be comatose and death can occur. The unabsorbed ethanol should be removed by gastric lavage after intubating the patient to prevent aspiration. Avoid the use of depressant drugs or the excessive administration of fluids.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Carbon oxides expected to be the primary hazardous combustion product.

Special protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.



Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) Unusual Fire and Explosion Hazards: +1.703.527.3887 (INT)

- May produce a floating fire hazard.
- Static ignition hazard can result from handling and use.
- Vapors may travel to source of ignition and flash back.
- Vapors may settle in low or confined spaces.

Alcohols burn with a pale blue flame which may be extremely hard to see under normal lighting conditions. Personnel may only be able to feel the heat of the fire without seeing flames. Extreme caution must be exercised in fighting alcohol fires. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire.

Flammable Properties Classification OSHA/NFPA Class IB Flammable Liquid. Flash point 13 - 16 °C (55.4 - 60.8 °F) ASTM D 56 Autoignition temperature 363°C (685.4°F)

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions:

Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up:

Absorb with an inert dry material and place in an appropriate waste disposal container. Keep disposal containers closed when finished.

7. HANDLING AND STORAGE

Precautions for safe handling:

Do not get on skin or in eyes. Do not inhale vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. Open and handle container with care. Metal containers involved in the transfer of this material should be grounded and bonded.

Conditions for safe storage, including any incompatibilites:

Keep container tightly closed in a cool, dry and well-ventilated place. Containers which are opened must be



carefully resealed and kept upright to prevent leaks/spills. Consult local fire codes for additional states and kept upright to prevent leaks/spills.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters, e.g., occupational exposure limit values or biological limit values:

Occupational Exposure Limits

Component	Source	Туре	Value	Note
Ethyl alcohol	US (OSHA)	TWA	1000 ppm / 1,900 mg/m3	29 CFR 1910.1000 Table Z-1 Limits for Air Contaminants.
Isopropyl Alcohol	US (ACGIH)	TWA	200 ppm	
Isopropyl Alcohol	US(ACGIH)	STEL	400 ppm	
Methanol	USA (ACGIH)	WA	200 ppm	ACGIH Treshold Limit Value
Methanol	US (OSHA)	STEL	250 ppm, 325 mg/m3	29 CFR 1910.1000 Table Z-1 Limits for Air Contaminants.
Methyl Isobutyl Ketone	US (ACGIH)	TWA	50 ppm	
Methyl Isobutyl Ketone	US (ACGIH)	STEL	75 ppm	

Appropriate engineering controls:

General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

Individual protection measures, such as personal protective equipment:

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face 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).

Hand protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

Skin and body protection:

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	Liquid. Colorless.
Odor	Specific data not available
Odor threshold	Specific data not available
рН	Specific data not available
Freezing point	-114°C (-173°F)
Initial boiling point and boiling range	80°C (176°F)
Flash point	13 - 16 °C (55.4 - 60.8 °F) ASTM D 56
Evaporation rate	Specific data not available - expected to be rapid.
Flammability (solid, gas)	Flammable
Upper / Lower flammability or explosive limits	19%(V) / 3.3%(V)
Vapor pressure	44.6mmHg (5.94 kPa)
Vapor Density	1.6 (air =1)
Relative Density	Specific data not available
Solubility(ies)	Completely Soluble
Partition coefficient n-octanol/water(ies)	Specific data not available
Auto-ignition temperature	363 °C (685 °F)
Decomposition temperature	Specific data not available
Formula (ETHANOL)	C2H6O
Formula (ISOPROPYL ALCOHOL)	C3H8O
Formula (METHYL ALCOHOL)	CH4O
Formula (METHYL ISOBUTYL KETONE)	C6H12O
Formula (WATER)	H2O
Molecular Weight (ETHANOL)	46.07 g/mol
Molecular Weight (ISOPROPYL ALCOHOL)	60.1 g/mol
Molecular Weight (METHYL ALCOHOL)	32.04 g/mol
Molecular Weight (METHYL ISOBUTYL KETONE)	100.16 g/mol
Molecular Weight (WATER)	18.02 g/mol

10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	Vapors may form explosive mixture with air.
Conditions to avoid (e.g., static discharge,	Heat, flames, and sparks. Extreme temperatures and direct
shock or vibration)	sunlight.
Incompatible materials	Strong acids, strong oxidizing agents
Hazardous decomposition products	Carbon oxides are expected to be, under fire conditions, the primary hazardous decomposition products.

11. TOXICOLOGICAL INFORMATION

• Ethyl Alcohol 64-17-5



Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) Signs and Symptoms of Exposure +1.703.527.3887 (INT)

Central nervous system depression, narcosis, damage to the heart. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Product Summary:

Ethanol is not toxic by OSHA standards. Coingestion of sedative hypnotics or tranquilizers can increase the toxic affects of ethanol.

Acute Toxicity:

LC50 (inhl)	Rat	20000ppm	10 hrs.
LC50 (Oral)	Rat	7060mg/Kg BWT	
LDLo (Oral)	Human	1400 mg/Kg BWT	

Irritation:

Eyes (ETHANOL)

Eye exposure to Ethanol generally causes transient pain, irritation, and reflex lid closure. A foreign-body sensation may persist for one to two days. Vapors produce transient stinging and tearing, but no apparent adverse effects. Transiently impaired preception of color may occur with acute ingestion or chronic alcoholism. Standard Draize eye test (rabbit) - Dose: 500 mg Reaction: Severe Dose: 500 mg/24 hrs Reaction: Mild

Skin

Standard Draize skin test (rabbit) - Dose: 20 mg/24 hrs Reaction: Moderate Repeated exposure may cause skin dryness or cracking.

Carcinogenicity

IARC: Not classifiable as a human carcinogen. ACGIH: Not classifiable as a human carcinogen. NTP: Not classifiable as a human carcinogen. OSHA: Not classifiable as a human carcinogen.

Other Hazards

Organ	Description
Eyes	Irritating to the eyes. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage.
Ingestion	May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. Advanced stages can lead to respiratory failure, kidney failure, coma, and death.
Inhalation	Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause narcotic effects in high concentration. Vapors may cause dizziness or suffocation.
Skin	Mildly irritating to the skin. May cause dermatitis by de-fatting the skin from prolonged or repeated contact.
Chronic	Prolonged exposure can cause liver, kidney, and heart damage. Long term exposure can cause loss of appetite, weight loss, nervousness, memory loss, mental retardation.

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• Methyl Alcohol 67-56-1

Product Summary:

Classification of teratogenicity or reproductive toxicity cannot be determined with available data for this product. No data available to designate the product as causing specific target organ toxicity through repeated exposure. No data available to designate product as an aspiration hazard.

Acute Toxicity:

LC50 (Inhl)	Rat	64,000 mg/Kg BWT	4 hours
LD50 (Oral)	Rat	5,628 mg/Kg BWT	
LD50 (Skin)	Rabbit	15,800 mg/Kg BWT	

Irritation:

Eyes (METHANOL)

Direct contact with the eyes produces a mild, reversible irritation, assuming treatment is initiated promptly. Methanol ingestion or inhalation can lead to visual disturbance that can proceed to blindness.

Skin

Standard Draize skin test (rabbit) - Dose: 20 mg/24 hrs Reaction: Moderate Repeated exposure may cause skin dryness or cracking.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other Hazards

Organ	Description
Eyes	Irritating to the eyes.
Ingestion	Poison, may be fatal or cause blindness if swallowed. Cannot be made non-poisonous. Ingestion may
	cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Inhalation	Toxic by inhalation. Vapor harmful. May be irritating to the respiratory tract.
Skin	Toxic in contact with skin. Irritating to skin.



	Toxic: danger of very serious irreversible effects through inhalation, in contact with stogs 27. 388 to (NAT)
Chronic	Experiments have shown reproductive toxicity effects on laboratory animals. May cause adverse liver
CHIONIC	effects. May cause adverse kidney effects. Methanol is slowly eliminated from the body, therefore it can
	have cumulative toxicity effects with repeated exposures.

• Water 7732-18-5

Product Summary:

Do data available for the teratogenic, mutagenic, or reproductive toxicity effects of this product.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other Hazards

Organ	Description	
Inhalation	May cause respiratory tract irritation upon inhalation.	

Isopropyl Alcohol 67-63-0

Product Summary:

Long-term exposure (2 years) to Isopropyl Alcohol via inhalation at concentrations up to 5000 ppm caused no exposure related increases in tumors in animals. No data available for the teratogenicity, mutagenicity, or reproductive toxicity of this product. No data available to designate the product as causing specific target organ toxicity through repeated exposure. No data available to designate product as an aspiration hazard.

Acute Toxicity:

LC50 (vapor)	Rat	19,000 ppm	8 hours
LD50 (oral)	Rat	4,396 mg/kg	
LD50 (skin)	Rabbit	12,870 mg/kg	

Irritation:

Eyes Rabbit - Irritating to eyes - 24 hours



Eyes (ISOPROPANOL)

Mildly irritating to the eye at an airborne concentration of 400 ppm, unpleasant at 800 ppm.

Skin

Moderate skin irritant

Carcinogenicity

IARC: Group 3: Not classifiable as to its carcinogenicity to humans.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other Hazards

Organ	Description
Eyes	Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. May cause transient corneal injury
Ingestion	Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. 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.
Inhalation	Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause narcotic effects in high concentration. Causes upper respiratory tract irritation. Inhalation of vapors may cause drowsiness and dizziness. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal. The probable oral lethal dose in humans is 240 ml (2696 mg/kg), but ingestion of only 20 ml (224 mg/kg) has caused poisoning.
Skin	May cause irritation with pain and stinging, especially if the skin is abraded. Isopropanol has a low potential to cause allergic skin reactions; however, rare cases of allergic contact dermatitis have been reported. May be absorbed through intact skin. Dermal absorption has been considered toxicologically insignificant.
Chronic	Prolonged exposure can be irritating to mucous membranes, skin, and the respiratory system. Can cause liver and kidney damage.

• Methyl Isobutyl Ketone 108-10-1

Product Summary:

Laboratory tests have shown teratogenic effects. No data available for the mutagenic or reproductive effects of the product. No data available to designate the product as causing specific target organ toxicity through single or repeated exposure. No data available to designate product as an aspiration hazard.

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LC50 (Inhalation)	Rat	16.4 mg/m3	4 hours
LD50 (Dermal)	Rabbit	> 16,000 mg/kg	
LD50 (Oral)	Rat	2,080 mg/kg	

Irritation:

Eyes (METHYL ISOBUTYL KETONE)

Rabbit - Moderate eye irritation - 24 hours

Skin

Rabbit - skin irritation - 24 hours

Teratogenicity (METHYL ISOBUTYL KETONE)

Methyl Isobutyl Ketone is teratogenic. Fetal death and developmental abnormalities occurred in the babies of mice that inhaled Methyl isobutyl ketone.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other Hazards

Organ	Description	
Eyes	Can be irritating to the eyes.	
Ingestion	Can be harmful if ingested.	
Inhalation	Can be harmful, causing respiratory tract irritation, if inhaled.	
Skin	Can be harmful, causing irritation, if absorbed through the skin.	

12. ECOLOGICAL INFORMATION

• Ethyl Alcohol 64-17-5

Ecotoxicity (aquatic and terrestrial, where available):

Acute Fish toxicity (ETHANOL)

LC50 / 96 HOUR Oncorhynchus mykiss (rainbow trout) > 10,000 mg/l



Product Information: 203.740.3471 Emergency Assistance (CHEMTREC): 1.800.424.9300 (USA) LC50 / 96 HOUR Pimephales promelas (fathead minnow) > 13,400 mg/l +1.703.527.3887 (INT)

Toxicity to aquatic plants (ETHANOL) Growth inhibition / 96 HOURS Chlorella vulgaris (Fresh water algae) 1,000 mg/l

Toxicity to microorganisms (ETHANOL)

Toxicity Threshold / Pseudomonas putida 6,500 mg/l Summary: Inhibition of cell multiplication begins.

Persistence and degradability:

Biodegradation is expected.

Bioaccumulative potential: Biaccumulation is unlikely

• Water 7732-18-5

Ecotoxicity (aquatic and terrestrial, where available): Ecotoxicity Not Applicable

Persistence and degradability:

No data available

Bioaccumulative potential: No data available

Other adverse effects:

No data available

Isopropyl Alcohol 67-63-0

Ecotoxicity (aquatic and terrestrial, where available): Acute Fish Toxicity (ISOPROPANOL) LC50 / 96 hours Pimephales promelas: 9,640 mg/L

Toxic to Daphnia and Other Aquatic Invertebrates EC50 / 24 h / Water Flea - 5,102 mg/L

Toxicity to Aquatic Plants (ISOPROPANOI) EC50 / 72 hours Scenedesmus subspicatus > 1,000 mg/L

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Persistence and degradability: No data available

Bioaccumulative potential: No data available

• Methyl Alcohol 67-56-1

Ecotoxicity (aquatic and terrestrial, where available): Acute Fish Toxicity (METHANOL) LC50 / 96 hours Lepomis macrocirus: 15,400 mg/L / LC50 / 96 hours Fathead minnow: 29,400 mg/L

Toxicity to Aquatic Plants (METHANOL)

EC50 / 96 hours Scenedesmus capricornutum: 22,000 mg/L

Persistence and degradability:

This material is expected to be readily biodegradable. There is evidence that it is degraded under anaerobic conditions.

Bioaccumulative potential: Bioconcentration factor (BCF) of 0.2. This material is not expected to bioaccumulate.

Other adverse effects:

BOD: 600 mg/g - 1120 mg/g COD: 1420 mg/g

• Methyl Isobutyl Ketone 108-10-1

Ecotoxicity (aquatic and terrestrial, where available): Acute Toxicity to Fish (METHYL ISOBUTYL KETONE) LC50 / 48 hours Leuciscus idus melanotus- 480 mg/L

Toxicity to Aquatic Plants (METHYL ISOBUTYL KETONE)

EC50 / 48 hours Green algae- 2,000 mg/L

Persistence and degradability:

Biotic/ Aerobic

Bioaccumulative potential:

No data available



13. DISPOSAL CONSIDERATIONS

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:

Vapors may collect in empty containers. Treat empty containers as hazardous. Dispose of spill-clean up and other wastes in accordance with Federal, State, and local regulations.

14. TRANSPORT INFORMATION

Description of waste residues and information on their safe handling and methods of disposal:

UN number	1987
UN proper shipping name	Alcohols, n.o.s. (Ethanol, Isopropanol)
Transport hazard class(es)	3
Packing group (if applicable)	I

IMDG

UN-Number: 1987 Class: 3 Packing Group: II EMS-No: F-E, S-D Proper shipping name: ALCOHOLS, N.O.S. (ETHANOL, ISOPROPANOL) Marine pollutant: No IATA UN-Number: 1987 Class: 3 Packing Group: II Proper shipping name: Alcohols, n.o.s. (Ethanol, Isopropanol)

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question:

OSHA Hazards

Flammable liquid, Target Organ Effect, Irritant, Toxic by inhalation, Toxic by ingestion, Toxic by skin absorption

All ingredients are on the following inventories or are exempted from listing

Country	Notification	
Australia	AICS	
Canada	DSL	
China	IECS	
European Union	EINECS	
Japan	ENCS/ISHL	
Korea	ECL	
New Zealand	NZIoC	
Philippines	PICCS	
United States of America	TSCA	

Revision Number: 4.0



No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313: Methanol CAS-No. 67-56-1 Revision Date 2007-07-01

SARA 311/312 Hazards

Acute Health Hazard Chronic Health Hazard Fire Hazard

CERCLA

Methanol CAS-No. 67-56-1. RQ: 5,000 lbs

Methyl Isobutyl Ketone CAS-No. 108-10-1, RQ: 5,000 lbs

Massachusetts Right To Know Components

Ethanol CAS-No.64-17-5 Revision Date 2007-03-01

Isopropyl Alcohol CAS-No. 67-63-0 Revision Date 1987-01-01

Methanol CAS-No.67-56-1 Revision Date 2007-07-01

Methyl Isobutyl Ketone CAS-No. 108-10-1 Revision Date 1993-04-24

Pennsylvania Right To Know Components

Ethanol CAS-No.64-17-5 Revision Date 2007-03-01

Isopropyl Alcohol CAS-No. 67-63-0 Revision Date 1987-01-01

Methanol CAS-No.67-56-1 Revision Date 2007-07-01

Methyl Isobutyl Ketone CAS-No. 108-10-1 Revision Date 1993-04-24

Water CAS-No. 7732-18-5

New Jersey Right To Know Components

Ethanol CAS-No.64-17-5 Revision Date 2007-03-01

Isopropyl Alcohol CAS-No. 67-63-0 Revision Date 1987-01-01

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Methanol CAS-No.67-56-1 Revision Date 2007-07-01

Methyl Isobutyl Ketone CAS-No. 108-10-1 Revision Date 1993-04-24

Water CAS-No. 7732-18-5

California Prop 65 Components

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (ETHYL ALCOHOL) CAS No. 64-17-5 Revision Date: December 11, 2009

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. METHANOL CAS-No. 67-56-1 Revision Date 2012-03-16

WARNING! This product contains a chemical known to the State of California to cause cancer. METHYL ISOBUTYL KETONE CAS-No. 108-10-1 Revision Date 2011-11-04

16. OTHER INFORMATION: INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

Disclaimer

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