Goldleaf Scientific

GHS SAFETY DATA SHEET

SPECIALLY DENATURED ALCOHOL (SDA) 3C, 200 PROOF

SDS DATE: 07/22/2020

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME (MRE Product Identifier): Specially denatured alcohl (SDA) 3C, 200 proof; ethyl alcohol (alcohol, denatured)

PRODUCT INTENDED USE AND RESTRICTION: For professional use only.

MANUFACTURER: MRE
ADDRESS: 27532 West HWY 30
Sutherland, Nebraska 69165
PHONE: 308-386-2468

CHEMTREC PHONE (24HR Emergency Telephone): 1-800-424-9300 (Within U.S.A)
INTERNATIONAL CHEMTREC CALL: 1-703-527-3887
OTHER CALLS: 1-402-884-8700 (M-F, 8 AM-5 PM, Central time (U.S.A & Canada); within U.S.A)

FAX PHONE: 1-402-884-8776 (M-F, 8 AM-5 PM, Central time (U.S.A & Canada); within U.S.A)

SECTION 1 NOTES: None Available

SECTION 2: HAZARDS IDENTIFICATION

GHS LABELING AND CLASSIFICATION: This product meets the definition of the following hazard classes as defined by the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).
GHS CLASSIFICATION ACCORDING TO ANNEX II:

HEALTH	ENVIRONMENTAL	PHYSICAL
Serious eye damage/eye irritation-2A Skin corrosion/irration-3 STOT SE-2 Acute toxicity (Oral)-Category 5	Not classified	Flammable Liquids-Category 2
SIGNAL WORD:	**DANGER**	

SYMBOL:		
HAZARD STATEMENT:		H225: Highly flammable liquid and vapor. H319: Causes serious eye irritation. H315: Causes skin irritation. H335: May cause respiratory irritation H336: May cause drowsiness or dizziness H303: May be harmful if swallowed.
PRECAUTIONARY STATEMENTS:	**PREVENTIVE:**	P210-Keep away from heat/sparks/open flames/hot surfaces.—No smoking. P241: Use explosion-proof electrical/ventilating/light/…/equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P280: Wear protective gloves/protective clothing/eye protection/face protection. P264: Wash hands thoroughly after handling. P261: Avoid breathing fume/gas/mist/vapors/spray. P270: Do not eat, drink or smoke when using this product.
	RESPONSE:	P370+380+376+378: In case of fire: Evacuate area, stop leak if safe to do so, use proper fire-extinguishers (e.g. alcohol-resistant foam, dry powder, CO2) for extinction P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313: If eye irritation persists, get medical advice/attention P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
	STORAGE:	PPA4G0E3 +1203 O5:F S 9tore in a well ventilated place. Keep cool. P410: Protect from sunlight.

	DISPOSAL:	P501: Dispose of contents/container to relevant local and national regulations.

Any Regional Considerations: N/A

SECTION 2 NOTES: None Available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT: Ethyl Alcohol, Isopropyl Alcohol
UN#: UN1987

NAME	CAS#	EC#	ICSC#	% VOL
Ethyl Alcohol 200 proof	64-17-5	200-578-6	0044	95.3%
Isopropyl Alcohol	67-63-0	200-661-7	0554	4.7%

CARCINOGENICITY
OSHA: NO **ACGIH:** NO **NTP:** NO **IARC:** NO
OTHER: Classified PROVEN by State of California Proposition 65 [Ethyl alcohol 200 proof]

IMPURITIES/STABILIZING ADDITIVES IDENTIFICATION: None

IMPURITIES/STABILIZING ADDITIVES CLASSIFICATION (if applicable): None

SECTION 3 NOTES: None Available

SECTION 4: FIRST AID MEASURES

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken fo medical attention, if necessary. Take copy of label and MSDS to health professional with contaminated individual.

EMERGENCY OVERVIEW: Flammable liquid and vapor. Irritating to eyes and skin. May cause irritation of respiratory tract. May affect central nervous system. Aspiration hazard if swallowed—can enter lungs and cause damage. This substance has caused adverse reproductive and fetal effects in humans.

ROUTES OF ENTRY/FIRST AID:

EYES CONTACT: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.

SKIN CONTACT: May be harmful in contact with skin. In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention. In case of serious skin contact, wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear. In case of serious inhalation, evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

INGESTION: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Central nervous system disorders, Pre-existing eye disorders, liver disorders, skin disorders.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: Treat symptomatically.

SECTION 4 NOTES: None Available

SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: For SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use AR-AFFF alcohol resistant fire fighting foam, water spray or fog. Use water spray to cool fire-exposed containers. Water may be ineffective. DO NOT use straight streams of

water.

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS: Use AR-AFFF alcohol resistant fire fighting foam. Water may be ineffective on flames but may be used to cool fire exposed containers. Wear Self Contained Breathing Apparatus (SCBA) when fighting fire in a confined space.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
(***Define specific hazards arising from the chemical e.g., nature of any hazardous combustion products***)
Flames are invisible in daylight. Extremely flammable materials may release vapors that travel long distances, ignite, and flash back.

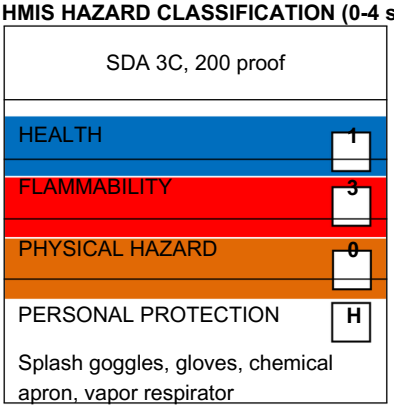
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, aldehydes, and ketones

FLAMMABLE LIMITS IN AIR, UPPER: 19.0%
(% BY VOLUME) LOWER: 3.3%

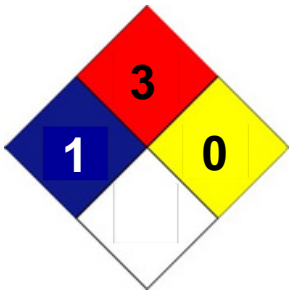
FLASH POINT:
F: 55 ºF
C: 13 ºC
METHOD USED: Closed Cup
AUTOIGNITION TEMPERATURE:

F: 685 ºF
C: 363 ºC

HMIS HAZARD CLASSIFICATION (0-4 scale):



NFPA HAZARD CLASSIFICATION:



HEALTH=2
FLAMMABILITY=3
REACTIVITY=0
OTHER=N/A

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: In case of a large spill, wear splash googles, full suit, vapor respirator, boots, gloves. A self contained breathing apparatus should be used to avoid inhalation of the product.

ENVIRONMENTAL PRECAUTIONS: Keep run-offs out of municipal sewers and open bodies of water. Comply with local, state and national laws and regulations.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: For SMALL SPILL, dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. For LARGE SPILL, keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities. Land spill, apply appropriate foam to diminish vapor and fire hazard. Water spill, use natural barriers or oil spill control booms to limit spill travel. Allow to aerate. Air spill, apply water spray or mist to knock down vapors.

SECTION 6 NOTES: Do not move mobile equipment or vehicles into the area without first checking for flammable atmosphere.

SECTION 7: HANDLING AND STORAGE

PRECAUTION FOR SAFE HANDLING: Wear personal protective equipment. Ensure adequate ventilation. Use explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. Do not breath vapors or spray mist. Do not get in eyes, on skin, or on clothing.

CONDITIONS FOR SAFE STORAGE (any incompatibilities): Keep containers tightly closed in a dry, cool and well-ventilated area. Protect container against physical damage. Detached or outside storage is preferred. Inside storage should be in an NFPA approved flammable liquids storage room or cabinet. All ignition sources should be eliminated. NFPA 30, Flammable and Combustible Liquids Code, should be followed for all storage and handling. Consult local fire codes for additional storage information.

SECTION 7 NOTES: None Available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below permissible exposure limits.

INGREDIENTS	ACGIH	NIOSH	OSHA-FINAL PELs
Ethyl Alcohol	1000 ppm TWA	1000 ppm TWA; 1900 mg/m3 TWA 3300 ppm IDLH	1000 ppm TWA; 1900 mg/m3 TWA
Isopropyl Alcohol	500ppm STEL		

ENGINEERING CONTROLS:

VENTILATION : Ensure adequate ventilation, especially in confined areas.

PERSONAL PROTECTIVE EQUIPMENT(PPE):

RESPIRATORY PROTECTION: Follow the OSHA respirator regulations found in 29 CFR 1910.134, Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

EYE PROTECTION: Wear appropriate protective eyeglasses or chemical safety goggles.

SKIN PROTECTION: Wear appropriate protective gloves and clothing to prevent skin exposure.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: In case of large spill, splash goggles, chemical suit, vapor respirator, rubber boots, chemical-resistant gloves and a self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient: consult a specialist BEFORE handling this product.

SECTION 8 NOTES: None Available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, Colorless

PHYSICAL STATE: Liquid

COLOR: Colorless

ODOR: Sweet

pH AS SUPPLIED: Neutral

pH (Other):

FREEZING POINT:

F: -174.0 ˚F
C: -114.3 ˚C

BOILING POINT:

F: 176 ºF
C: 79 ºC

MELTING POINT:

F: -173.4 ˚F (NTP, 1992)
C: -114.1 ˚C

FLASH POINT:
F: 55˚F (NTP, 1992)
C: 12.8 ˚C

EVAPORATION RATE (BASIS=1): Not Available.

FLAMMABILITY (by %volume):
UPPER FLAMMABILITY LIMIT: 3.3% (NTP, 1992)
LOWER FLAMMABILITY LIMIT: 19.0% (NTP, 1992)

VAPOR PRESSURE (mmHg): 59.3 mmHg
@
F: 68ºF
C: 20 ºC

VAPOR DENSITY (AIR = 1): 1.59
@
F: Ambient air temperature
C: Ambient air temperature

SOLUBILITY IN WATER: Easily soluble in cold water, hot water, methanol, diethyl ether. Soluble in acetone.

PARTITION COEFFICIENT n-octanol/water:-0.32 (logPow)

AUTO-IGNITION TEMPERATURE:
F: 689 ˚F (USCG, 1999)
C: 365 ˚C

DECOMPOSITION TEMPERATURE: No data available
F: No data available
C: No data available

SPECIFIC GRAVITY (H2O = 1): 0.790
@
F: 68ºF
C: 20 ºC

PERCENT SOLIDS BY WEIGHT: Not Available

PERCENT VOLATILE:
BY WT/ BY VOL @
F: Not Available
C: Not Available

VOLATILE ORGANIC COMPOUNDS (VOC):
WITH WATER: Not Available **LBS/GAL**
WITHOUT WATER: Not Available **LBS/GAL**

MOLECULAR WEIGHT: 46.0414

VISCOSITY: 1.200 cP
@
F: 68ºF
C: 20 ºC

SECTION 9 NOTES: None Available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: Ethanol rapidly absorbs moisture from the air. Can react vigorously with oxiders. The following oxidants have been demonstrated to undergo vigorous/explosive reaction with ethanol: barium perchlorate, bromine pentafluoride, calcium hypochlorite, chloryl perchlorate, chromium trioxide, chromyl chloride, dioxygen difluoride, disulfuryl difluoride, disulfuryl difluoride, fluorine nitrate, hydrogen peroxide, iodine heptafluoride, nitric acid nitrosyl perchlorate, perchloric acid permanganic acid, peroxodisulfuric acid, potassium dioxide, potassium perchlorate, potassium permanganate, ruthenium(VIII) oxide, silver perchlorate, silver peroxide,

uranium hexafluoride, uranyl perchlorate. Ethanol reacts violently/explodes with the following compounds: acetyl bromide (evolves hydrogen bromide) acetyl chloride, aluminum, sesquibromide ethylate, ammonium hydroxide & silver oxide, chlorate, chromic anhydride, cyanuric acid + water, dichloromethane + sulfuric acid + nitrate (or) nitrite, hydrogen peroxide + sulfuric acid, iodine + methanol + mercuric oxide, manganese perchlorate + 2,2-dimethoxy propane, perchlorates, permanganates + sulfuric acid, potassium superoxide, potassium tert-butoxide, silver & nitric acid, silver perchlorate, sodium hydrazide, sulfuric acid + sodium dichromate, tetrachlorisilane + water. Ethanol is also incompatible with platinum, and sodium. No really safe conditions exist under which ethyl alcohol and chlorine oxides can be handled. Reacts vigorously with acetyl chloride.

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID (STABILITY): Incompatible materials. Heat, source of ignition.

POSSIBILITY OF HAZARDOUS REACTIONS: Contact with Bromine pentafluoride is likely to cause fire or explosion. Ethanol ignites on contact with chromyl chloride. Ethanol ignites on contact with iodine heptafluoride gas. It ignites then explodes upon contact with nitrosyl perchlorate. Addition of platinum black catalyst caused ignition (ethyl alcohol 200 proof). Ethanol has an explosive reaction with the oxidized coating around potassium metal. Ethanol ignites and then explodes on contact with acetic anhydride + sodium hydrosulfate (ignites and may explode), disulfuric acid + nitric acid, phosphorous (III) oxide platinum, potassium-tert-butoxide + acids. Ethanol forms explosive products in reaction with the following compound: ammonia + silver nitrate (forms silver nitride and silver fulminate), iodine + phosphorus (forms ethane iodide), magnesium perchlorate (forms ethyl perchlorate), mercuric nitrate, nitric acid + silver (forms silver fulminate) silver nitrate (forms ethyl nitrate) silver(I) oxide + ammonia or hydrazine (forms silver nitride and silver fulminate), sodium (evolves hydrogen gas). Sodium Hydrazide + alcohol can produce an explosion. Alcohols should not be mixed with mercuric nitrate, as explosive mercuric fulminate may be formed. May form explosive mixture with manganese perchlorate + 2,2-dimethoxypropane. Addition of alcohols to highly concentrate hydrogen peroxide forms powerful explosives. Explodes on contact with calcium hypochlorite Vapor may explode if ignited in an enclosed area. Containers may explode when heated or involved in a fire.

INCOMPATIBILITY MATERIAL: Strong oxidizing agents, acids, alkali metals, ammonia, hydrazine, peroxides, sodium, acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, perchloric acid, silver nitrate, mercuric nitrate, potassium-tert-butoxide, magnesium perchlorate, acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, potassium dioxide.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide.

SECTION 10 NOTES: None Available.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: The toxicity data of this product has not been determined by testing or research, but to our best knowledge, this product is minimally toxic. The toxicity data shown below is for reference only.

ROUTES OF EXPOSURE: Absorbed through skin. Eye contact. Inhalation. Ingestion.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:

CONTACT WITH EYES: It can cause serious irritation to eyes and symptoms may include redness, tearing and soreness.

CONTACT WITH SKIN: Irritant to skin. For long-time or repeated contact, it can cause skin dryness.

INHALATION: Under normal conditions of use and handling, no inhalation hazard is present. It may cause irritation to respiratory system if inhaling concentrated vapor of this liquid. Symptoms may include coughing, drowsiness, dizziness and tightness in chest.

INGESTION: Harmful by ingestion. May cause irritation to intestinal tract, stomach, liver and kidney. Symptoms may include nausea, vomiting, belly ache and diarrhea.

DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT- AND LONG-TERM EXPOSURE:

SHORT-TERM EFFECTS: The substance irritates the eyes. Inhalation of high concentration of vapor may cause irritation of the eyes and respiratory tract. The substance may cause effects on central nervous system.

LONG-TERM EFFECTS: The liquid defats the skin. The substance may have effects on the upper respiratory tract and central nervous system, resulting in irritation, headache, fatigue and lack of concentration. Chronic ingestion of ethanol may cause liver cirrhosis.

NUMERICAL MEASURES OF TOXICITY:

LD50/LC50:

CAS# 64-17-5:

Inhalation, mouse: LC50 = 39 gm/m3/4H;
Inhalation, rat: LC50 = 20000 ppm/10H;

Oral, mouse: LD50 = 3450 mg/kg;
Oral, rabbit: LD50 = 6300 mg/kg;
Oral, rat: LD50 = 7060 mg/kg;
Oral, rat: LD50 = 9000 mg/kg;<BR.
IRRITATION DATA:
Draize test, rabbit, eye: 500 mg Severe; Draize test, rabbit, eye: 500 mg/24H Mild; Draize test, rabbit, skin: 20 mg/24H Moderate

CARCINOGENICITY: CAS# 64-17-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

EPIDEMIOLOGY: Ethanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Prenatal exposure to ethanol is associated with a distinct pattern of congenital malformations that have collectively been termed the "fetal alcohol syndrome".

TERATOGENICITY: Oral, Human - woman: TDLo = 41 gm/kg (female 41 week(s) after conception) Effects on Newborn - Apgar score (human only) and Effects on Newborn - other neonatal measures or effects and Effects on Newborn - drug dependence.
REPRODUCTIVE EFFECTS: Intrauterine, Human - woman: TDLo = 200 mg/kg (female 5 day(s) pre-mating) Fertility - female fertility index (e.g. # females pregnant per # sperm positive females; # females pregnant per # females mated).
NEUROTOXICITY: No information available.

MUTAGENICITY: DNA Inhibition: Human, Lymphocyte = 220 mmol/L.; Cytogenetic Analysis: Human, Lymphocyte = 1160 gm/L.; Cytogenetic Analysis: Human, Fibroblast = 12000 ppm.; Cytogenetic Analysis: Human, Leukocyte = 1 pph/72H (Continuous).

CHROMATID EXCHANGE: Human, Lymphocyte = 500 ppm/72H (Continuous).

SECTION 11 NOTES: None Available.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY (AQUATIC AND TERRESTRIAL, WHERE AVAILABLE): Ecotoxicity: Fish: Rainbow trout: LC50 = 12900-15300 mg/L; 96 Hr; Flow-through @ 24-24.3°CFish: Rainbow trout: LC50 = 11200 mg/L; 24 Hr; Fingerling (Unspecified)Bacteria: Phytobacterium phosphoreum: EC50 = 34900 mg/L; 5-30 min; Microtox test. When spilled on land it is apt to volatilize, biodegrade, and leach into the ground water, but no data on the rates of these processes could be found. Its fate in ground water is unknown. When released into water it will volatilize and probably biodegrade. It would not be expected to adsorb to sediment or bioconcentrate in fish.

PERSISTENCE AND DEGRADABILITY: Biodegradation is expected to occur rapidly in the environment based on numerous screening tests using different types of inocula and incubation periods. Ethanol was degraded with half-lives on the order of a few days using microcosms constructed with a low organic sandy soil and groundwater, indicating it is unlikely to be persistent in the environment.

BIOACCUMULATIVE POTENTIAL: Bioaccumulation is not significant. This product is readily biodegradable.

MOBILITY IN SOIL: Very high mobility

OTHER ADVERSE EFFECTS: No information available.

SECTION 12 NOTES: None Available.

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous water. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification. Ultimate disposal of the chemical must consider: the material's impact on air quality; potential migration in soil or water; effects on animals, aquatic, and plant life; and conformance with environmental and public health regulations.

RCRA HAZARD CLASS: RCRA P-Serioes-None listed. RCRA U-Series-None listed.

DESCRIPTION OF WASTE RESIDUES AND INFORMATION ON THEIR SAFE HANDLING AND METHODS OF DISPOSAL, INCLUDING ANY CONTAMINATED PACKAGING: Carbon dioxide, carbon monoxide, ethanol vapor can go through rapid photochemical reaction in atmosphere

SECTION 13 NOTES: None Available.

SECTION 14: TRANSPORT INFORMATION

U.N. GHS TRANSPORT REQUIREMENT

UN NUMBER: UN 1987
PROPER SHIPPING NAME: Alcohols, n.o.s.
RANSPORT HAZARD CLASS: 3 (Flammable Liquid)
PACKING GROUP: II
LABEL STATEMENT: None listed
MARINE POLLUTANT: This product is not designated as a marine pollutant by the Department of Transportation (49 CFR 172.101, Appendix B)

SPECIAL PRECAUTIONS FOR USER: Follow safe handling and storage procedures, Check atmosphere for explosiveness and oxygen deficiency.

SECTION 14 NOTES: None Available.

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TOXIC SUBSTANCE CONTROL ACT (TSCA): CAS# 64-17-5 is listed on the TSCA inventory. None of the chemicals in this material have a Significant New Use Rule (SNUR) under TSCA.

OCCUPATIONAL, SAFETY AND HEALTH ADMINISTRATION (OSHA): Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT (CERCLA): None of the chemicals in this material have an RQ.

CLEAN WATER ACT (CWA): This chemical is not listed as Hazardous Substances under the CWA. This chemical is not listed as Priority Pollutants under the CWA. This chemical is not listed as Toxic Pollutants under the CWA.

CLEAN AIR ACT (CAA): This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) CODES:

CAS# 64-17-5: Immediate, delayed, fire

SARA SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES: None of the chemicals in this product have a TPQ.

SARA 313 REPORTABLE INGREDIENTS: No chemicals are reportable under Section 313.

STATE REGULATIONS: CAS# 64-17-5 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

INTERNATIONAL REGULATIONS:

European/International Regulations
European Labeling in Accordance with EC Directives
CAS# 64-17-5 is listed on the Canadian Ingredient Disclosure List.

SECTION 15 NOTES: None Available.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Midwest Renewable Energy be liable for any claims, losses or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Midwest Renewable Energy has been advised of the possibility of such damages.

ACRONYMS/ABBREVIATIONS:

ACGIH-American Conference of Governmental Industrial Hygienists
CAA-Clean Air Act
CAS-Chemical Abstracts Service
CERCLA-Comprehensive Response Compensation, and Liability Act

CHEMTREC-It serves as a round-the-clock resource for obtaining immediate response information for incidents involving hazardous material and dangerous goods.
CWA-Clean Water Act
EC-European Commission
GHS-Globally Harmonized System of Classification and Labelling of Chemicals
IARC-International Agency for the Research on Cancer
ICSC-International Chemical Safety Cards
LC50-The concentration of a chemical in air or of a chemical in water which causes the death of 50% of a group of test animals.
LD50-The amount of a chemical, given all at once, which causes the death of 50% of a group of test animals.
NIOSH-The National Institute for Occupational Safety and Health
NTP-National Toxicology Program
OSHA-Occupational Safety and Health Administration
RCRA-Resource Conservation and Recovery Act
SARA-Superfund Amendments and Reauthorization Act
STOST-SE-Specific Target Organ Toxicity Single Exposure
TSCA-Toxic Substance Control Act
U.N.-United Nation
UNCED-United Nations Conference on Environment and Development
VOL-Volume
WT-Weight