SAFETY DATA SHEET



Date Prepared: 06/05/2006

MSDS No: 8601 Date-Revised: 04/01/2015

Revision No: 9

SANIHOL -70% Denatured Ethanol Solution

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SANIHOL -70% Denatured Ethanol Solution **GENERAL USE:** Authorized uses are listed in 27 CFR 20.117.

MANUFACTURER

Tarr Acquisition, LLC 4115 W. Turney Ave. Phoenix, AZ 85019

Product Stewardship: 602-233-2000

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEMTREC (US Transportation): (800) 424 - 9300 CANUTEC (Canadian Transportation): (613) 996 - 6666

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 4 Flammable Liquids, Category 2

GHS LABEL



Flame

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H226: Flammable liquid and vapour.

H302: Harmful if swallowed.

H304: May be fatal if swallowed and enters airways.

H301: Toxic if swallowed.

H314: Causes severe skin burns and eye damage.

PRECAUTIONARY STATEMENT(S)

Prevention:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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

P233: Keep container tightly closed.

P102: Keep out of reach of children.

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: WARNING! Flammable liquid and vapor. Harmful or fatal if swallowed. Vapor harmful. May be irritating to eyes and respiratory tract. May cause central nervous system depression.

POTENTIAL HEALTH EFFECTS

EYES: Liquid is moderately irritating to the eyes. High vapor concentrations may also be irritating. Direct contact with the liquid or exposure to its vapors or mists may cause stinging, tearing, redness, swelling and eye damage.

SKIN: Liquid is moderately irritating to the skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

INGESTION: POISONOUS. May be fatal or cause blindness if swallowed. Ingestion may cause irritation of the digestive tract and may have a narcotic effect including signs of CNS depression such as dizziness, headache, drowsiness, loss of coordination, and fatigue. Ingestion may cause low blood pressure, rapid heart beat and liver damage.

INHALATION: Excessive exposure to this product may cause headache, CNS depression, drowsiness, dizziness, loss of appetite, irritation of the respiratory tract, drunkeness, unconsciousness, or death.

MEDICAL CONDITIONS AGGRAVATED: Preexisting diseases in or history of ailments involving skin, central nervous system, liver and kidney.

TARGET ORGAN STATEMENT: This product contains ethanol. Alcoholic beverage consumption has been associated with brain damage, heart damage, and pancreatitis in humans. The relevance of these findings to ethanol exposure in industrial environments is uncertain.

COMMENTS HEALTH: Can cause optic nerve damage (blindness).

COMMENTS: None identified.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | Vol. % | CAS |
|---------------|---------|-----------|
| Ethanol | 61 - 65 | 64-17-5 |
| Methanol | 2 - 5 | 67-56-1 |
| IPA | 2 - 5 | 67-63-0 |
| Water | 28 - 32 | 7732-18-5 |

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

SKIN: Flush skin with water while removing contaminated clothing. If irritation occurs, get medical attention. Do not reuse clothing or shoes until cleaned.

INGESTION: Call poison control center or get medical help immediately. If patient is conscious and alert, give 8 ounces of water or juice and induce vomiting, keeping patient's head below hips to prevent aspiration of liquid into lungs. Never induce vomiting on an unconscious person.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Seek immediate medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE TOXICITY: Irritation as noted above. Early to moderate CNS depression may be evidenced by giddiness, headache, dizziness, and nausea; in extreme cases, unconsciousness and death may occur. Liver damage may be evidenced by loss of appetite, jaundice and sometimes pain in the upper abdomen on the right side. Shortness of breathing, redness of skin, swelling of tissues and watery eyes.

CHRONIC EFFECTS: None identified.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use "alcohol resistant" foam, dry chemical, or CO2. Water may be ineffective, but water applied as a spray can absorb some of the fire's heat and should be used to keep fire-exposed containers cool.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide and unidentified organic compounds may be formed during combustion.

EXPLOSION HAZARDS: When heated above the flash point, this material emits flammable vapors which, when mixed with air, can burn or be explosive. Fine mists or sprays may be flammable at temperatures below the flash point.

FIRE FIGHTING PROCEDURES: WARNING. Poisonous and Flammable Liquid. Clear fire area of unprotected personnel. Do not enter confined fire space without full bunker gear, including a positive pressure NIOSH approved SCBA. Cool fire exposed containers with water.

FIRE FIGHTING EQUIPMENT: The use of SCBA is recommended for firefighters. Water spray may be used to cool containers exposed to heat or flame.

HAZARDOUS DECOMPOSITION PRODUCTS: None identified.

COMMENTS: None identified.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: None identified. LARGE SPILL: None identified.

GENERAL PROCEDURES: WARNING. Poisonous and Flammable Liquid. Ventilate area of leak or spill. Remove all sources of ignition. Clean-up personnel require protective clothing and respiratory protection from vapors. Only specially trained or qualified personnel should handle the emergency.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep away from heat, sparks, and flame. Surfaces that are hot may ignite even liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone.

HANDLING: Use with sufficient ventilation to keep employee exposure below recommended limits. Provide adequate ventilation for storage, handling and use, especially for enclosed or low spaces. Avoid contact of liquid with eyes and prolonged skin exposure. Do not allow product to contact open flame or electrical heating elements because dangerous decomposition products may form. Ground and bond all equipment when transferring from one container to another.

STORAGE: Store away from heat, sparks, and open flame. Keep containers tightly closed when not in use. Do not weld, cut, grind, solder, or drill on or near empty containers. Empty containers may contain explosive concentrations of product vapors.

COMMENTS: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition; they may explode and cause injury or death.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

| OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200) | | | | | | | | | |
|---|------|-----------------|-------|-----------|-------|-------------|--------|--|--|
| | | EXPOSURE LIMITS | | | | | | | |
| | | OSHA PEL | | ACGIH TLV | | SupplierOEL | | | |
| Chemical Name | | ppm | mg/m³ | ppm | mg/m³ | ppm | mg/m³ | | |
| Ethanol | TWA | 1000 | 1900 | 1000 | 1884 | 400 | 980 | | |
| | STEL | | | | | 400 | 1,225 | | |
| Methanol | TWA | 200 | 260 | 200 | 262 | | | | |
| | STEL | | | 250 | 328 | | | | |
| IPA | TWA | 400 | 980 | 200 | 490 | NL [1] | NL [1] | | |
| | STEL | | | 400 | 960 | NL | NL | | |

OSHA TABLE COMMENTS:

1. NL = Not Listed

ENGINEERING CONTROLS: Provide exhaust ventilation sufficient to keep the airborne concentration of this product below its exposure limits. Exhaust air may need to be cleaned by scrubbers or filters to reduce environmental contamination.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Use chemical safety goggles and/or full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.

SKIN: Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

RESPIRATORY: If exposure may or does exceed occupational exposure limits (Sec. 8) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

PROTECTIVE CLOTHING: Where splashing is possible, wear impervious clothing and boots.

WORK HYGIENIC PRACTICES: Use good personal hygiene when handling this product. Wash hands after use, before eating, drinking, smoking, or using the toilet.

OTHER USE PRECAUTIONS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

COMMENTS: May be harmful or fatal if swallowed. May irritate body tissues. Use with adequate ventilation. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Mild odor.

APPEARANCE: Clear, colorless liquid.

pH: Essentially neutral.

PERCENT VOLATILE: 100

FLASHPOINT AND METHOD: (72°F) to (77°F) CC

FLAMMABLE LIMITS: 2% to 12%

AUTOIGNITION TEMPERATURE: Not Determined

VAPOR PRESSURE: 32 mm Hg

Notes: 32-96 mmHg

VAPOR DENSITY: Heavier than air. **BOILING POINT:** (170°F) to (178°F)

FREEZING POINT: NDA = no data available.

MELTING POINT: Not Determined SOLUBILITY IN WATER: Soluble

EVAPORATION RATE: Slower than ether.

DENSITY: 7.3 at 25°C (77°F)

SPECIFIC GRAVITY: 0.845 to 0.905 at 25°C (77°F)

(VOC): 6.550 to 6.61 LBS./gal.

10. STABILITY AND REACTIVITY

REACTIVITY: Yes

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Avoid heat, sparks, flame and contact with strong oxidizing agents. Do not store or handle in aluminum equipment at temperatures above 120 deg. F.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and unidentified organic compounds may be formed during combustion. There should be no decomposition if stored and applied as directed.

INCOMPATIBLE MATERIALS: Strong oxidizing agents, strong acids, strong alkalies.

11. TOXICOLOGICAL INFORMATION

ACUTE

INHALATION LC₅₀: None identified.

EYE EFFECTS: Poison. May be fatal or cause blindness, if swallowed. Cannot be made nonpoisonous.

SENSITIZATION: None identified.

REPRODUCTIVE EFFECTS: None identified.

TARGET ORGANS: This product contains ethanol. Alcoholic beverage consumption has been associated with brain damage, heart damage, and pancreatitis in humans. The relevance of these findings to ethanol exposure in industrial environments is uncertain. Laboratory studies have shown that petroleum distillates may cause kidney,

liver, or lung damage. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

TERATOGENIC EFFECTS: No evidence of teratogenicity was noted following inhalation exposure of pregnant rats by airborne concentrations of up to 16,000 ppm of ethyl alcohol for 7 hours on days 1 through 19 of gestation.

GENERAL COMMENTS: None identified.

COMMENTS: Poison. May be fatal or cause blindness, if swallowed. Cannot be made nonpoisonous.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Do not flush to sewer.

ECOTOXICOLOGICAL INFORMATION: Keep out of waterways.

GENERAL COMMENTS: Avoid uncontrolled releases of this material. Where spills are possible, a comprehensive spill response plan should be developed and implemented.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

EMPTY CONTAINER: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Do not pressurize, cut weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks static electricity, or other sources of ignition.

RCRA/EPA WASTE INFORMATION: Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Ethanol Solutions **PRIMARY HAZARD CLASS/DIVISION:** 3

UN/NA NUMBER: UN 1170

PACKING GROUP: II

NAERG: 127

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Flammable Liquid

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: This product should be reported as an immediate (acute) health hazard, delayed (chronic) health hazard, and a fire hazard.

FIRE: Yes PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

313 REPORTABLE INGREDIENTS: Methyl alcohol (CAS 67-56-1)

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: To the best of our knowledge, none of the chemicals in this product are listed as an extremely hazardous substance under Section 302 of SARA Title III nor does this product contain any other such substances.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: This product is a mixture and each component is listed in the TSCA Inventory of Chemical Substances.

TSCA STATUS: None identified.

OSHA HAZARD COMM. RULE: This material is hazardous as defined by the American OSHA.Hazard Communication Standard (29 CFR 1910.1200).

GENERAL COMMENTS: The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

16. OTHER INFORMATION

PREPARED BY: Compliance Dept. **Date-Revised:** 04/01/2015 **REVISION SUMMARY:** This MSDS replaces the 04/01/2015 MSDS.





NFPA STORAGE CLASSIFICATION: These ratings are part of a specific hazard communication program and should be disregarded where individuals are not trained in the use of this hazard rating system. You should be familiar with the hazard communication programs applicable to your workplace.

MANUFACTURER DISCLAIMER: The information contained herein is based on the data available to us and is believed to be accurate. However, Tarr Acquisition, LLC (Tarr, LLC) makes no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Tarr, LLC assumes no responsibility for injuries from the use of the product described herein.