MATERIAL SAFETY DATA SHEET

ETHANOL 190 CC2

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Tarr, Incorporated

P.O. Box 12570

Portland, OR 97212

INFORMATION PHONE: (503) 288-5294

EMERGENCY PHONE: CHEMTREC 800-424-9300 (US) Day or night

International Call Collect CHEMTREC 202-483-7616

PRODUCT NAME: ETHANOL 190 CC2

PRODUCT NUMBER: E190CC2

UPC NUMBER:

PREPARED BY: Patricia Rodabaugh

DATE PREPARED: 5/3/1999 **LAST REVISION:** 4/30/1999

SYNONYMS: TARSOL E190 CC2

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS# W	Veight %	OSHA PEL	ACGIH TLV	NOTE
Ethyl alcohol	64-17-5	79-83	1000 ppm	1000 ppm	
Isopropyl alcohol	67-63-0	8-10	400 ppm	400 ppm	
Methyl alcohol	67-56-1	<4	200 ppm	200 ppm	
Methyl isobutyl ketone	108-10-1	<1	50 ppm	50 ppm	
Water	7732-18-5	4-5	N/A	N/A	

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: WARNING! Flammable liquid and vapor. Harmful or fatal if swallowed. Vapor harmful.

POTENTIAL HEALTH EFFECTS

EYE CONTACT: Liquid or vapor may cause eye irritation.

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.

INGESTION: May be fatal or cause blindness if swallowed. Ingestion may have a narcotic effect including signs of CNS

depression such as dizziness, headache, drowsiness, loss of coordination, and fatigue.

SKIN CONTACT: 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).

SIGNS AND SYMPTOMS OF EXPOSURE:

Shortness of breathing, confused behavior, redness of skin, swelling of tissues, watery eyes, and nausea.

4. FIRST AID MEASURES

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

attention.

INHALATION: Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen

should be administered by qualified personnel. Get medical attention.

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Portland, Oregon Phoenix, Arizona Auburn, Washington Vancouver, Washington

Print Date: 10/28/2004

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.

SKIN CONTACT: Flush skin with water. If irritation occurs, get medical attention.

AGGRAVATED MEDICAL CONDITIONS:

Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product. Impared function from preexsiting disorders may be aggravated by exposure to this product.

SUPPLEMENTAL HEALTH INFORMATION:

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.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 52 F FLASH POINT METHOD USED: Tag Closed Cup

AUTOIGNITION: N/A LEL: 0.014 UEL: 0.36

EXTINGUISHING MEDIA:

Use water fog, "alcohol" foam, dry chemical, or CO2.

SPECIAL FIRE FIGHTING PROCEDURES:

WARNING. 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.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

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

COMBUSTION PRODUCTS:

Carbon monoxide and unidentified organic compounds may be formed during combustion.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:

WARNING. Flammable. 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. HANLDING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

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.

OTHER PRECAUTIONS:

KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue 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.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

If exposure may or does exceed occupational exposure limits (Sec. 2) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-suppling respir. of an air-purifying respir. for organic vapors.

VENTILATION:

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.

PROTECTIVE GLOVES:

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Test data indicate the best protection is provided by neoprene, nitrile, and natural rubber gloves.

EYE PROTECTION:

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.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Wear gloves and protective clothing which are impervious to this product for the duration of anticipated exposure, if there is potential for skin contact.

WORK / HYGENIC PRACTICES:

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

ENGINEERING CONTROLS:

Facilities storing or utilizing this material should be equipped with and eyewash facility and a safety shower.

EXPOSURE GUIDELINES:

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

9. PHYSICAL AND CHEMICAL PROPERTIES

SOLUBILITY IN WATER: Infinite in water

APPEARANCE AND ODOR: Colorless, clear liquid. Mild odor.

BOILING POINT: 147 F PERCENT VOLATILE: 100

VAPOR PRESSURE: 14.5 - 96 **PH:** N/A

EVAPORATION RATE: Slower than ether **MOLECULAR WEIGHT:** N/A

POUNDS PER GALLON: 6.09 VAPOR DENSITY: Heavier than air

SPECIFIC GRAVITY: 0.73 OTHER PROPERTIES:

MELTING POINT: N/A FREEZING POINT: NDA

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Avoid strong alkalies and oxidizing agents.

INCOMPATIBILITY:

Strong oxidizers.

HAZARDOUS DECOMPOSITION OR BY PRODUCTS:

Carbon monoxide and unidentified organic compounds may be formed during combustion.

HAZARDOUS POLYMERIZATION: Will Not Occur

CONDITIONS TO AVOID: Avoid heat, flame, and other sources of ignition.

11. TOXICOLOGY INFORMATION

NDA

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12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

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.

14. TRANSPORTATION INFORMATION

DOT Proper Shipping Name: Ethyl alcohol solutions **PACKING GROUP:** II

GUIDE NUMBER: 127

HAZARD CLASS: 3 DOT CLASS: Flammable liquid

UN NUMBER: UN 1170

15. REGULATORY INFORMATION

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

16. OTHER INFORMATON

HMIS INFORMATION: HEALTH: 2 FLAMMABILITY: 4 REACTIVITY: 0 PROTECTIVE: G

SARA Title III Information:

SARA 302: 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.

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

SARA 313: Methyl isobutyl ketone and methanol are listed as toxic chemicals under SEC. 313.

N/A = Not Applicable NDA = No Data Available

Disclaimer

The information contained herein is based on the data available to us and is believed to be accurate. However, Tarr, Incorporated makes no warranty, expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Tarr, Inc. assumes no responsibility for injuries from the use of the product described herein.

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