

MATERIAL SAFETY DATA SHEET

MIL-T-81772B TYPE II

Tarr

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Tarr, Inc.
4115 W. Turney Avenue
Phoenix, AZ 85019

INFORMATION PHONE: (602) 233-2000

EMERGENCY PHONE: CHEMTREC 800-424-9300 (US) Day or night
International Call Collect CHEMTREC 202-483-7616

PRODUCT NAME: MIL-T-81772B TYPE II

PRODUCT NUMBER: 2208, 2569

UPC NUMBER:

PREPARED BY: Patricia Rodabaugh

DATE PREPARED: 5/27/2003

LAST REVISION: 8/16/1999

SYNONYMS:

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

Print Date: 11/16/2004

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Weight %	OSHA PEL	ACGIH TLV	NOTE
Methyl ethyl ketone	78-93-3	48-52	200 ppm	200 ppm	
Methyl isobutyl ketone	108-10-1	18-22	50 ppm	50 ppm	
1-Methoxy-2-Propanol	107-98-2	28-31	100 ppm	100 ppm	
2-methoxy-1-propanol	1589-47-5	<1			

3. HAZARDOUS IDENTIFICATION

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

POTENTIAL HEALTH EFFECTS

EYE CONTACT: Liquid is mildly irritating to the eyes. High vapor concentrations may also be irritating.

INHALATION: Vapors may be irritating to the nose, throat, and respiratory tract. High vapor concentrations may cause central nervous system (CNS) depression.

INGESTION: Liquid is moderately toxic and may be harmful if swallowed; may produce CNS depression. Ingestion of product may result in vomiting; aspiration (breathing) of vomitus into the lungs must be avoided as even small quantities may result in aspir. pneumontis.

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

SIGNS AND SYMPTOMS OF EXPOSURE:

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.

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 to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Get medical attention immediately.

INGESTION: Do not give liquids if victim is unconscious or drowsy. Otherwise, give 2 glasses of water and induce vomiting by giving 30cc syrup of ipecac* (or touching finger to the back of victim's throat). Keep victim's head below hips while vomiting. Call doctor.

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

AGGRAVATED MEDICAL CONDITIONS:

Preexisting eye and skin disorders may be aggravated by exposure to acetone.

SUPPLEMENTAL HEALTH INFORMATION:

* Note to physician: If victim is a child, give no more than 1 glass of water and 15cc (1 tablespoon) syrup of ipecac. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 32 F

FLASH POINT METHOD USED: Tag Closed Cup

AUTOIGNITION: NDA

LEL: 0.014 **UEL:** 0.138

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. HANDLING 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-supplying respir. or 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:

Test data indicate the best protection is provided by butyl 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:

Where splashing is possible, full chemically resistant protective clothing (e.g., acid suit) and boots are required.

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 ventilation. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

SOLUBILITY IN WATER: Soluble in ketones and hydrocarbons, negligible in water

APPEARANCE AND ODOR: Clear, colorless liquid with pungent odor.

BOILING POINT:	175 F	PERCENT VOLATILE:	100
VAPOR PRESSURE:	8 - 70.940	PH:	N/A
EVAPORATION RATE:	Slower than ether	MOLECULAR WEIGHT:	N/A
POUNDS PER GALLON:	6.98	VAPOR DENSITY:	Heavier than air
SPECIFIC GRAVITY:	0.838	OTHER PROPERTIES:	VOC's: 6.98 lbs./gal.
MELTING POINT:	NDA		
FREEZING POINT:	NDA		

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Avoid heat, sparks, flame and contact with strong oxidizing agents. Prevent vapor accumulation.

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

See supplemental health info. below.

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:	Flammable liquids, n.o.s. (Methyl ethyl ketone, 1-methoxy-2-propanol)	PACKING GROUP:	II
HAZARD CLASS:	3	GUIDE NUMBER:	128
UN NUMBER:	UN 1993	DOT CLASS:	Flammable liquid

15. REGULATORY INFORMATION

This product is listed on the EPA/TSCA inventory of chemical substances. Per 40 CFR part 82, this product does not contain nor was it directly manufactured with any class I or class II ozone depleting substance.

16. OTHER INFORMATION

HMIS INFORMATION: **HEALTH:** 2 **FLAMMABILITY:** 3 **REACTIVITY:** 0 **PROTECTIVE:** H

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 ethyl ketone (78-93-3) and Methyl isobutyl

SUPPLEMENTAL INFO. MEK can potentiate the neurotoxicity of hexacarbon compounds (n-hexane, methyl n-butylketone, and 2,5-hexanedione) and the liver and kidney toxicity of haloalkane solvents.

MEK has been demonstrated to potentiate (i.e. shorten the time of onset) the peripheral neuropathy caused by either n-hexane or methyl n-butyl ketone. MEK by itself has not been demonstrated to cause peripheral neuropathy.

Evaporation rate: 1.46

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.