

MATERIAL SAFETY DATA SHEET



Date Prepared: 01/18/2006

MSDS No: 2209

MIL-T-81772 TYPE III

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MIL-T-81772 TYPE III

PRODUCT CODE: 2209, 2338

ALTERNATE TRADE NAME(S): MIL-T-81772 TYPE 3

MANUFACTURER

Tarr Acquisition, LLC
4115 W. Turney Ave.
Phoenix, AZ 85019
Customer Service: 1-602-233-2000

24 HR. EMERGENCY TELEPHONE NUMBERS

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

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Wt. %</u>	<u>CAS</u>
Ethyl methyl ketone	26 - 32	78-93-3
Acetic Acid Ethyl Ester	28 - 32	141-78-6
Toluene	8 - 12	108-88-3
Benzene	0.01 - 0.02	71-43-2
Xylenes (o-,m-,p- isomers)	5 - 8	1330-20-7
Ethyl benzene	0.05 - 0.08	100-41-4
2-Methoxy-1-Methylethylacetate	18 - 22	108-65-6

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

<u>Chemical Name</u>	<u>EXPOSURE LIMITS</u>					
	<u>OSHA PEL</u>		<u>ACGIH TLV</u>		<u>Supplier</u>	
	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>	<u>ppm</u>	<u>mg/m³</u>
Ethyl methyl ketone	TWA 200		200			
Acetic Acid Ethyl Ester	TWA 400 ^[1]	1400	400	1400	NL	NL
	STEL NL	NL	NL	NL	NL	NL
Toluene	TWA 200a		50	188		
	STEL a ^[2]					
Benzene	TWA 1 % ^[3]		5 %			
Xylenes (o-,m-,p- isomers)	TWA 100		100			
Ethyl benzene	TWA 100		50			
2-Methoxy-1-Methylethylacetate	TWA		[4]			

OSHA TABLE COMMENTS:

1. US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910-1000)
2. (10-min max peak)
3. Carcinogen
4. NL = Not Listed

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

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

POTENTIAL HEALTH EFFECTS

EYES: Liquid is moderately irritating to the eyes. High vapor concentrations may also be irritating.

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: Liquid is moderately toxic and may be harmful if swallowed; may product 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 aspiration pneumonitis.

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

ACUTE EFFECTS: Early to moderate CNS depression may be evidenced by giddiness, headache, dizziness, and nausea; in extreme cases, unconsciousness and death may occur. Aspiration pneumonitis may be evidenced by coughing, labored breathing and cyanosis.

MEDICAL CONDITIONS AGGRAVATED: Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product. Impaired function from preexisting disorders may be aggravated by exposure to this product.

TARGET ORGANS: Near fatal exposures may result in congestive effects to a wide variety of organs.

4. FIRST AID MEASURES

EYES: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel.

SKIN: Remove contaminated clothing/shoes. Flush skin with water. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned.

INGESTION: DO NOT INDUCE VOMITING. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. 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. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: (23°F)

FLAMMABLE LIMITS: 0.01 to 0.115

AUTOIGNITION TEMPERATURE: Not Determined

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

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! 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.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: 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

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.

COMMENTS: 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 CONTROLS / PERSONAL PROTECTION

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 PROTECTION

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. 2) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-supplying respir. of an air-purifying respir. for organic vapors.

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

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

pH: Essentially neutral.

PERCENT VOLATILE: 100

VAPOR PRESSURE: 3.7 - 73

VAPOR DENSITY: Heavier than air.

BOILING POINT: (171°F) to (284°F)

FREEZING POINT: NDA = no data available.

MELTING POINT: No data available.

SOLUBILITY IN WATER: Complete solubility with most hydrocarbon solvents, partial solubility with water.

EVAPORATION RATE: Slower than ether.

DENSITY: 7.33

SPECIFIC GRAVITY: 0.870 to 0.90

(VOC): 7.333 lbs./gal.

10. STABILITY AND REACTIVITY

STABLE: YES

STABILITY: Stable under normal conditions.

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

INCOMPATIBLE MATERIALS: Strong oxidizers.

11. TOXICOLOGICAL INFORMATION

SENSITIZATION: While there is no evidence that industrially acceptable levels of toluene vapors (e.g., the TLV) have produced cardiac effects in humans, animal studies have shown that inhalation of high levels of toluene produced cardiac sensitization. Such sensitization may cause fatal changes in heart rhythms. This latter effect was shown to be enhanced by hypoxia or the injection of adrenalinlike agents. Prolonged and repeated exposures to high concentrations of toluene have resulted in hearing loss in laboratory rats. While the effect of solvents on the human auditory system is uncertain, solvent abusers exposed to high doses of toluene show signs of hearing loss, and occupational exposure to toluene may interact with noise in causing hearing loss in the work environment. The effects of solvents on human hearing are uncertain. Solvent abusers and noise interaction with toluene in the work environment may cause signs of hearing loss.

CARCINOGENICITY:

CARCINOGENICITY COMMENTS: This product may contain benzene (CAS No. 71-43-2) at a concentration less than 10 ppm.

REPRODUCTIVE TOXIN: Toluene may be harmful to the human fetus based on positive test results with laboratory animals. Case studies show that prolonged intentional abuse of toluene during pregnancy can cause birth defects in humans.

12. ECOLOGICAL INFORMATION

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. 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: Flammable Liquids, N.O.S.

TECHNICAL NAME: (ethyl acetate, methyl ethyl ketone)

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN 1993

PACKING GROUP: II

LABEL: Flammable liquid

NAERG: 128

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: YES **PRESSURE GENERATING:** NO **REACTIVITY:** NO **ACUTE:** YES **CHRONIC:** YES

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

313 REPORTABLE INGREDIENTS: Methyl Ethyl Ketone (78-93-3)

Toluene (108-88-3)

Xylene (mixed isomers) (1330-20-7)

and certain glycols are listed

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.

16. OTHER INFORMATION

REASON FOR ISSUE: Updated MSDS information and changed to new format.

APPROVAL DATE: 01/20/2006

PREPARED BY: P. Rodabaugh

REVISION SUMMARY New MSDS

HMIS CODES

FLAMMABILITY: 3 **HEALTH:** 2 **PHYSICAL HAZARD:** 0 **PERSONAL PROTECTION:** G

ADDITIONAL MSDS INFORMATION: Last revision 2/19/2002.

MANUFACTURER DISCLAIMER: The information contained herein is based on the data available to us and is believed to be accurate.

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