MATERIAL SAFETY DATA SHEET

T-91SB

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: T-91SB
PRODUCT NUMBER: 3090

UPC NUMBER:

PREPARED BY: Patricia Rodabaugh

DATE PREPARED: 11/30/1999 **LAST REVISION:** 9/11/1998

SYNONYMS:

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name CAS # Weight % OSHA PEL ACGIH TLV NOTE

1-Methoxy-2-Propanol 107-98-2 75-78 100 ppm 100 ppm

2-methoxy-1-propanol 1589-47-5 0-3

Methyl isobutyl ketone 108-10-1 20-24 50 ppm 50 ppm

3. HAZARDOUS IDENTIFICATION

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

POTENTIAL HEALTH EFFECTS

EYE CONTACT: Material may cause eye irritation. Direct contact with the liquid or exposure to its vapors or mists may cause

stinging, tearing, redness.

INHALATION: Vapors may be irritating to the upper 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 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 if systoms persist.

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: 11/24/2004

INGESTION: Call a physician or poison control center immediately. If swallowed, induce vomitting immediately as

directed by medical personnel. Never give anything by mouth to an unconscious person.

SKIN CONTACT: 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.

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:

1-Methoxy-2-Propanol: Inhalation LC-50 (rat): >10,000 ppm/4 hour(s), Dermal LD-50 (rabbit): 13,000 - 14,000 mg/kg., skin irritation (rabbit): slight, eye irritation (rabbit): slight.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 86 F FLASH POINT METHOD USED: Tag Closed Cup
AUTOIGNITION: 530 F LEL: 0.014 UEL: 0.138

EXTINGUISHING MEDIA:

Use water spray, dry chemical, carbon dioxide (CO2), or alcohol foam.

SPECIAL FIRE FIGHTING PROCEDURES:

The use of SCBA is recommended for firefighters. Water spray may used to cool containers exposed to heat or flame. Water may be ineffective in fighting the fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Flammable. Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignitiaon and flash back. Prevent buildup of vapors or gases to explosive concentrations. Forms peroxides of unknown stability.

COMBUSTION PRODUCTS:

Carbon monoxide and carbon dioxide 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. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone. Keep from contact with oxidizing materials. Keep container closed. Store away from heat and light.

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. or an air-purifying respir. for organic vapors.

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VENTILATION:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Use precess enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

PROTECTIVE GLOVES:

It is a good industrial hygiene practice to minimize skin contact.

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 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: soluble

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

 BOILING POINT:
 241 F
 PERCENT VOLATILE:
 100

 VAPOR PRESSURE:
 8 - 14.5 mmHg @ 20 C
 PH:
 N/A

EVAPORATION RATE: Slower than ether MOLECULAR WEIGHT:

POUNDS PER GALLON: 7.16 VAPOR DENSITY: Heavier than air

SPECIFIC GRAVITY: 0.85 OTHER PROPERTIES:

MELTING POINT: -143 F FREEZING POINT: NDA

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Forms peroxides of unknown stability. Avoid strong alkalies and oxidizing agents.

INCOMPATIBILITY:

Strong oxidizers.

HAZARDOUS DECOMPOSITION OR BY PRODUCTS:

Carbon monoxide and carbon dioxide may be formed during combustion.

HAZARDOUS POLYMERIZATION: Will Not Occur

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

11. TOXICOLOGY INFORMATION

Not list as a carcinogenicity classification (components present at 0.1% or more): IARC: not listed, ACGIH: not listed, NTP: not listed,

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OSHA: not listed.

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. (1-Methoxy-2- **PACKING GROUP:** II

Propanol, Methyl Isobutyl Ketone) GUIDE NUMBER: 128

HAZARD CLASS: 3 DOT CLASS: Flammable liquid

UN NUMBER: UN 1993

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 INFORMATON

HMIS INFORMATION: HEALTH: 1 FLAMMABILITY: 3 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

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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