MATERIAL SAFETY DATA SHEET

Tarr

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

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Tarr, Incorporated
P.O. Box 12570
Portland, OR 97212
INFORMATION PHONE: (503) 288-5294
EMERGENCY PHONE: (503) 288-5294 (800) 424-9300
PRODUCT NAME: BLANKET WASH SD 1993
PRODUCT NUMBER: BWSD1993
PREPARED BY: Vincent McClain
DATE PREPARED: 1/31/94
SYNONYMS:

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS	OSHA PEL	ACGIH TLV	Weight %
Acetone	67-64-1	750 ppm	750 ppm	0-9
Isopropyl alcohol	67-63-0	400 ppm	400 ppm	5-15
Toluene	108-88-3	100 ppm	50 ppm (skin)	61-71
Solvent naphtha, light aliphatic	64742-89-8	300 ppm	300 ppm	5-25

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW:

DANGER! Extremely flammable liquid and vapor.

POTENTIAL HEALTH EFFECTS

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

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: 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: 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:

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 an cyanosis (bluish skin). In severe cases death may result.

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.

INGESTION: If swallowed, do not induce vomitting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Material can be aspirated into lungs, causing chemical pheumonia.

SKIN CONTACT: Wash affected area with soap and 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 preexisiting disorders may be aggravated by exposure to this product. Laboratory studies have shown that petroleum distillates may cause kidney, liver, or lung damage. Reports have associated repeated and prolonged over expposure to solvents with permanent brain and nervous system damage.

SUPPLEMENTAL HEALTH INFORMATION:

Intentional abuse of toluene vapors has been linked to damage of brain, liver, kidney and to death. Many case sutdies involving abuse during pregnancy clearly indicate that toluene is a developmental toxicant.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 45 F **FLASH POINT METHOD USED:** Tag Closed Cup

AUTOIGNITION: NDA **FLAMMABLE LIMITS: LEL:** 1.00% **UEL:** 12.80%

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:

Remove all sources of ignition and provide ventilation. Wear protective equipment as given in Section 8. Dike around large spills to prevent spreading. Absorb small spills with inert material (clay, sand). Prevent contamination of surface waters.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

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:

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

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION (Specify Type):

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:

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:

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 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

APPEARANCE AND ODOR:
Clear, water-white liquid with characteristic odor.

SOLUBILITY IN WATER:
Soluble in most organic solvents, negligible in water

BOILING POINT: 133-232
VAPOR PRESSURE: 24 - 181 mmHg. @ 20 C
SPECIFIC GRAVITY: 0.739 - 0.789
MELTING POINT: NDA
FREEZING POINT: NDA
EVAPORATION RATE: Slower than ether
VAPOR DENSITY: Heavier than air

PERCENT VOLATILE: 100
PH: N/A
MOLECULAR WEIGHT: NDA
POUNDS PER GALLON: 5.09
OTHER PROPERTIES:

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID:
Stable under normal conditions.

INCOMPATIBILITY:
Strong acids or bases, oxidizers, alkali metals, and halogens.

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. TOXICOLOGICAL INFORMATION

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

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. TRANSPORT INFORMATION

DOT CLASS: Flammable liquid

HAZARD CLASS: 3

UN NUMBER: UN 1993

PACKING GROUP: II

GUIDE NUMBER: 128

PROPER SHIPPING NAME: Flammable liquid, n.o.s. (Toluene, Naphtha)

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 **REACTIVE:** 0 **PROTECTION:** H

SARA TITLE III DATA

Acetone (CAS 67-64-1), Toluene (108-88-3), and Ethyl benzene (100-41-4) are listed as toxic chemicals under Sec. 313 of SARA Title III. Under Sec. 311/312, this product should be reported as an immediate (acute) health hazard, delayed (chronic) health hazard, and a fire hazard.

Supplemental Health Info.

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 adrenalin-like agents. Prolonged and repeated exposures to high concentrations of toluene (mixed solvent) 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 (mixed solvent) 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 (mixed solvent) in the work environment may cause signs of hearing loss.

Toluene is not known to be mutagenic or carcinogenic. However, the available human and experimental data are limited and insufficient to assess carcinogenic potential. Toluene is not listed as a carcinogen by NTP, IARC, or OSHA. Intentional abuse of toluene vapors has been linked to damage of brain, liver, kidney and to death. Many case studies involving abuse during pregnancy clearly indicate that toluene is a developmental toxicant. Developmental toxic effects comparable to those observed in humans have been seen in lab animals but the effects were generally associated with maternal toxicity.

Xylene is not listed as a carcinogen by NTP, IARC, or OSHA and we are not aware of data indicating it is mutagenic, carcinogenic or a skin sensitizer. Laboratory animals exposed to prolonged and repeated high doses of xylene by various routes have shown hearing loss and effects in liver, kidneys, lungs, spleen, heart , blood and adrenals; developmental toxicity studies showed embryolethal/toxic and teratogenic effects with maternal toxicity. The effects of solvents on human hearing are uncertain. Solvent abusers and noise interaction with xylene (mixed solvent) in the work environment may cause signs of hearing loss.

A chronic feeding study in rats with ethyl benzene caused cancer (increase in total malignant tumors). Developmental toxicity studies in rats with ethyl benzene showed evidence of skeletal and other malformations at maternally toxic doses; similar effects were not seen in rabbits. Ethyl benzene was not mutagenic in: Ames test, yeast, drosophila, sister chromatic exchange with cultured human lymphocytes cells and in vitro cytogenetics assay with CHO cells.

OTHER ADDITIONAL INFORMATION:

N/A = Not applicable; NDA = No data available

This product contains a chemical or chemicals known to the State of California to cause cancer and/or reproductive toxicity.

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.