MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER:

Tarr, Incorporated

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PRODUCT NAME:

BLANKET WASH MS

PRODUCT NUMBER:

BWMS

PREPARED BY:

Patricia Rodabaugh

DATE PREPARED:

08/23/1994

SYNONYMS:

N/A, Product is a mixture

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

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS	OSHA PEL	ACGIH TLV	Weight %
D-Limonene		n/a	n/a	4852
Ethoxylated nonyl phenol	9016-45-9	Not established	10 ppm	48-52

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW:

COMBUSTIBLE. Harmful or fatal if swallowed - can enter lungs and cause damage. May cause eye and skin irritation or

POTENTIAL HEALTH EFFECTS

EYE CONTACT: Liquid is moderately 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: Irritating to the gastrointestinal tract, causing abdominal pain and vomiting, sometimes bloody.

Ingestion may casue CNS depression, low blood pressure, rapid heart beat and liver damage.

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:

Itching, burning or redness of the skin or eyes.

4. FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. If irritation occurs, get medical attention.

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

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.

SUPPLEMENTAL HEALTH INFORMATION:

None identified

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 228 F

FLASH POINT METHOD USED: Tag Closed Cup

AUTOIGNITION:

FLAMMABLE LIMITS: LEL: 0.00%

UEL: 6.10%

EXTINGUISHING MEDIA:

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

SPECIAL FIRE-FIGHTING PROCEDURES:

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

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:

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

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. 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 neoprene, or 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/HYGIENIC 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

APPEARANCE AND ODOR:

Clear, water-white to slightly yellow liquid with characteristic odor.

SOLUBILITY IN WATER:

Complete solubility with most hydrocarbon solvents, partial solubility with water.

BOILING POINT: 320 F

PERCENT VOLATILE: N/A

VAPOR PRESSURE: 2 mm of Hg mmHg. @ 20 C

PH: neutral

SPECIFIC GRAVITY: .912

MOLECULAR WEIGHT: N/A

MELTING POINT: N/A

POUNDS PER GALLON: 7.64

FREEZING POINT: N/A

OTHER PROPERTIES:

EVAPORATION RATE: Slower than ether VAPOR DENSITY: Heavier than air

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID:

Avoid heat, sparks, flame and contact with strong oxidizing agents. Do not store or handle in aluminum equipment at temperatures above 120 deg. F.

INCOMPATIBILITY:

Acids and excessive heat.

HAZARDOUS DECOMPOSITION OR BY PRODUCTS

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

HAZARDOUS POLYMERIZATION: May Occur

CONDITIONS TO AVOID:

Avoid heat, flame, and other sources of ignition.

11. TOXICOLOGICAL INFORMATION

This product may contain Ethylene Oxide (CAS No. 75-21-8) at concentrations up to 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:

Combustible Liquid

HAZARD CLASS:

UN NUMBER:

NA 1993

PACKING GROUP: III GUIDE NUMBER: 128

PROPER SHIPPING NAME: Combustible Liquid, n.o.s. (d-Limonene)

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: 1

FLAMMABILITY: 1

REACTIVE: 0

PROTECTION: G

SARA TITLE III DATA

For SARA Title III, Sec. 311/312 reporting, this material is classified as an immediate (acute) health hazard, delayed (chronic) health hazard, and a fire hazard.

Ethylene oxide (CAS No. 75-21-8) is listed as a toxic chemical under Sec. 313.

Ethylene oxide (75-21-8) is found on the extremely hazardous substances list (Sec. 302).

OTHER ADDITIONAL INFORMATION:

May contain up to 10 ppm of ethylene oxide.

Ethylene oxide (CAS #75-21-8) has been determined to be a cancer and reproductive hazard by the State of California.

The OSHA PEL and ACGIH TLV for this substance is 1 ppm.

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.