

MATERIAL SAFETY DATA SHEET

BRAKE WASH 1

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Tarr, Incorporated
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PRODUCT NAME: BRAKE WASH 1

PRODUCT NUMBER: BW1

UPC NUMBER:

PREPARED BY: Patricia Rodabaugh

DATE PREPARED: 6/25/2001

LAST REVISION: 6/25/2001

SYNONYMS:

Tarr

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

Print Date: 10/27/2004

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Weight %	OSHA PEL	ACGIH TLV	NOTE
Hexane, n-	110-54-3	83-87	50 ppm	50 ppm	
Acetone	67-64-1	8-10	750 ppm	750 ppm	
Methyl alcohol	67-56-1	4-7	200 ppm	200 ppm	
Ethyl alcohol	64-17-5	2-4	1000 ppm	1000 ppm	
Isopropyl alcohol	67-63-0	<1	400 ppm	400 ppm	
Methyl ethyl ketone	78-93-3	<1	200 ppm	200 ppm	

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: DANGER! Flammable. Vapor harmful. May be fatal or cause blindness if swallowed. Avoid prolonged breathing of vapors. Avoid contact with eyes and skin.

POTENTIAL HEALTH EFFECTS

EYE CONTACT: Moderately irritating to the eyes.

INHALATION: Excessive exposure to this product may cause headache, CNS depression, drowsiness, dizziness, loss of appetite, irritation of the respiratory tract, drunkenness, unconsciousness, or death.

INGESTION: POISONOUS. May be fatal or cause blindness if swallowed. Ingestion may have a narcotic effect including signs of CNS depression such as dizziness, headache, drowsiness, loss of coordination, and fatigue.

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:

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.

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: 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: 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. Impaired function from preexisting disorders may be aggravated by exposure to this product.

SUPPLEMENTAL HEALTH INFORMATION:

None identified

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 1 F

FLASH POINT METHOD USED: Tag Closed Cup

AUTOIGNITION: NDA

LEL: 0.011 **UEL:** 0.36

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. HANLDING 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-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:

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 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

APPEARANCE AND ODOR: Colorless, clear liquid. Mild odor.

BOILING POINT:	133 F	PERCENT VOLATILE:	100
VAPOR PRESSURE:	96 - 180	PH:	N/A
EVAPORATION RATE:	Slower than ether	MOLECULAR WEIGHT:	
POUNDS PER GALLON:	5.52	VAPOR DENSITY:	Heavier than air
SPECIFIC GRAVITY:	0.659 - 0.662	OTHER PROPERTIES:	
MELTING POINT:	NDA		
FREEZING POINT:	N/A		

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Avoid strong alkalies and oxidizing agents.

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

Poison. May be fatal or cause blindness, if swallowed. Cannot be made nonpoisonous.

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. (hexane, acetone)	PACKING GROUP:	II
HAZARD CLASS:	3	GUIDE NUMBER:	128
UN NUMBER:	UN 1993	DOT CLASS:	Flammable liquid

15. REGULATORY INFORMATION

SARA Title III Categories: 1. Immediate (Acute) Health Affects: YES 2. Delayed (Chronic) Health Effects: YES 3. Fire Hazard: YES 4. Sudden Release of Pressure Haz.: NO 5. Reactivity Hazard: NO

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: For Sec. 311/312 reporting, this product should be

SARA 313: Methyl alcohol, (67-56-1), n-hexane (100-54-3), methyl ethyl ketone (78-93-3) and ethyl alcohol (64-17-5)

Supplemental Health Info.: Other test rule related studies: 3) Rat oral reproductive toxicity: In the rat reproductive toxicity study, the NOAEL for reproduction indices was 1000 mg/kg, however, there was a marked increase in post-weaning pup mortality at this level**. The NOAEL for this effect was 500 mg/kg. Also, the NOAEL for parental female body weight decrease was 100 mg/kg. 4) In rat inhalation neurotoxicity and oral developmental neurotoxicity studies, there was no evidence that IPA caused neurotoxicity in adults (max dose 5000 ppm) or offspring (max dose 1200 mg/kg). 5) Subchronic rat and mouse inhalation toxicity: The subchronic NOAEL was 500 ppm based on clinical signs of CNS depression (both species) and increased body weight and blood effects (rat only) seen at 1500 ppm. (note: The information tagged by "***" above were submitted to EPA under the requirements of TSCA: 8(e).)

In response to a TSCA test rule, several studies of isopropanol (IPA) have been completed. The studies and their results are as follows: 1) Both mutagenicity studies, the mouse mononucleus and CHD assays, were negative. 2) Rat and rabbit oral teratogenicity and developmental toxicology: A) There was no evidence that IPA caused teratogenicity in rats or rabbits. B) Developmental toxicity was seen in rats at 1200 mg/kg (evidenced by decreased body weight**) while no developmental toxicity was seen in the rabbit study. For rats, the NOAEL was 400 mg/kg; for rabbits, 480 mg/kg. This work also identified pregnant rabbits to be approximately eight times more sensitive to IPA's lethal effects than non-pregnant rabbits**.

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.