

MATERIAL SAFETY DATA SHEET



Date Issued: 01/13/2009

MSDS No: BW275

BRAKEWASH 275

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BRAKEWASH 275**PRODUCT CODE:** BW275**MANUFACTURER**

Tarr, LLC

P.O. Box 12570

Portland OR 97212

Service Number: 503-288-5294**24 HR. EMERGENCY TELEPHONE NUMBERS****CHEMTREC (US Transportation) :**(800) 424 - 9300**CANUTEC (Canadian Transportation) :**(613) 996 - 6666

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: DANGER! Poison. Flammable. Contains methanol. Cannot be made non-poisonous. Liquid and vapor harmful. May be fatal or cause blindness if swallowed. Avoid prolonged breathing of vapors. Avoid contact with eyes and skin. Use only in well ventilated areas.

POTENTIAL HEALTH EFFECTS

EYES: Can cause moderate eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure eye tissue.

SKIN: Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

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.

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.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE TOXICITY: Irritation as noted above. Early to moderate CNS depression may be evidenced by giddiness, headache, dizziness, and nausea; in extreme cases, unconsciousness and death may occur.

Target Organ Effects: Prolonged and repeated exposure to n-hexane may cause peripheral neuropathy by damaging peripheral nerve tissue (that of the arms and legs) and result in muscular weakness and loss of sensation. Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, mild, reversible kidney effects, nasal damage, nervous system damage, testis damage, lung damage. Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: visual impairment,

central nervous system effects.

MEDICAL CONDITIONS AGGRAVATED: Pre-existing disorders of the following organ(s) or organ system(s) may be aggravated by exposure to this material: respiratory tract, eye, skin, lung (for example, asthma-like conditions), central nervous system, nervous system, male reproductive system.

COMMENTS HEALTH: Can cause optic nerve damage (blindness).

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt. %	CAS
Hexane	40 - 50	000110-54-3
Methanol	5 - 15	000067-56-1
Solvent naphtha, light aliphatic	40 - 50	064742-89-8
2-Propanol	5 - 7	000067-63-0

COMMENTS: Solvent Naphtha, light aliphatic contains n-Heptane (CAS 142-82-5) and cyclohexane (CAS 110-82-7).

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

SKIN: Remove contaminated clothing/shoes. Flush skin with water for at least 15 minutes. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned.

INGESTION: DO NOT INDUCE VOMITING. Do not attempt to give anything by mouth to an unconscious person. 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.

NOTES TO PHYSICIAN: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in person exposed to this material. this material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting. See Aggravated Medical Conditions.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: (-10°F) Lowest flash of chemical constituents within product.

FLAMMABLE LIMITS: 0.01 to 8.0

AUTOIGNITION TEMPERATURE: (437°F) to (867°F)

EXTINGUISHING MEDIA: Foam, carbon dioxide, dry chemical. Carbon dioxide and dry chemical powder may be used for small fires only.

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. Material is highly volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

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

SMALL SPILL: For small liquid spills (less than 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

LARGE SPILL: For large liquid spills (greater than 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Under Section 311 of the Clean Water Act (CWA) this material is considered an oil. As such, spills into surface waters must be reported to the National Response Center at (800) 424-8802.

AIR SPILL: Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Vapor may form an explosive mixture with air. U.S. regulations may require reporting releases of this material to the environment which exceed the reportable quantity to the National Response Center at (800) 424-8802.

GENERAL PROCEDURES: WARNING. Poisonous and Flammable Liquid. 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.

HANDLING: Avoid contact with skin, eyes, and clothing. Extinguish any naked flames. Do Not smoke. Remove ignition sources. Avoid sparks. The vapor is heavier than air, spreads along the ground and distant

ignition is possible. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (less than or equal to 1 m/sec until fill pipe submerged to twice its diameter, then less than or equal to 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations. Handle an open container with care in a well-ventilated area. Ventilate workplace in such a way that the Permissible Exposure Limit is not exceeded. Do not empty into drains.

STORAGE: Store away from heat, sparks, and open flame. Keep containers tightly closed when not in use. Do not weld, cut, grind, solder, or drill on or near empty containers. Empty containers may contain explosive concentrations of product vapors. Store in a diked, well-ventilated area, away from sunlight, ignition sources and other sources of heat. Bulk storage tanks should be diked.

COMMENTS: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue (liquid and/or vapor) 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; they may explode and cause injury or death.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Hexane	TWA	500 ^[1]	1800 ^[1]	50	180	NL	NL
	STEL					NL	NL
Methanol	TWA	200	260	200	262		
	STEL			250	328		
Solvent naphtha, light aliphatic	TWA	^[2]	^[2]			100 ^[3]	400 ^[3]
2-Propanol	TWA	400 ppm	980 mg/m ³	200 ppm	490 mg/m ³	NL ^[1]	NL ^[1]
	STEL	ppm	mg/m ³	400 ppm	960 mg/m ³	NL	NL
OSHA TABLE COMMENTS: 1. NL = Not Listed 2. Our supplier has adopted, as Interim Standards, the OSHA PELs that were established in 1989 and later rescinded. 3. In the absence of occupational exposure standards for this product, it is recommended that these values are adopted.							

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 PROTECTIVE EQUIPMENT

EYES AND FACE: Use chemical safety goggles and 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. 8) use a NIOSH approved respirator to prevent overexposure. In accord with 29 CFR 1910.134 use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

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: 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.

COMMENTS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Hydrocarbon.

COLOR: Clear, colorless liquid.

PERCENT VOLATILE: 100

VAPOR PRESSURE: Not Determined

VAPOR DENSITY: Heavier than air.

BOILING POINT: (147°F) to (200°F)

FLASHPOINT AND METHOD: (-10°F) Lowest flash of chemical constituents within product.

SOLUBILITY IN WATER: Partially Soluble

DENSITY: 5.987

SPECIFIC GRAVITY: 0.710 to 0.720

(VOC): 5.987 lbs./gal.

10. STABILITY AND REACTIVITY

STABILITY: Avoid heat, flame, and other sources of ignition.

CONDITIONS TO AVOID: Avoid strong alkalies and oxidizing agents.

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

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Solvent naphtha, light aliphatic	> 2000 mg/kg (Rat)	> 2000 mg/kg (rat)	> 5000 ppm / 1 hour (rat)

DERMAL LD₅₀: > 2000 g/kg (rat)

Notes: Results for solvent naphtha, light aliphatic.

ORAL LD₅₀: > 2000 mg/kg (rat)

INHALATION LC₅₀: > 5000 ppm/1 hour, Rat

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

CHRONIC: Cardiovascular system: Chronic abuse of similar materials has been associated with irregular heart rhythms and cardiac arrest. Central nervous system: Repeated exposure affects the nervous system. Kidney: caused kidney effects in male rats which are not considered relevant to humans.

SENSITIZATION: Not expected to be a skin sensitizer.

TARGET ORGANS: Laboratory studies have shown that petroleum distillates may cause kidney, liver, or lung damage. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage.

GENERAL COMMENTS: Developmental Information: This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

COMMENTS: Our supplier reports that information given is based on product testing, and/or similar products and/or components.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Absorbs to soil and has low mobility. Readily biodegradable. Oxidizes rapidly by photo-chemical reactions in air. Has the potential to bioaccumulate.

ECOTOXICOLOGICAL INFORMATION: Acute Toxicity - Fish and Aquatic Invertebrates: Harmful: 10 less than LC/EC/IC50 less than or equal to 100 mg/l Algae: Low toxicity: LC/EC/IC50 greater than 100 mg/l.

DISTRIBUTION: Mobility: Floats on water.

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: (n-hexane and methanol)

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN 1993

PACKING GROUP: II

NAERG: 128

REPORTABLE QUANTITY (RQ) UNDER CERCLA: 5,000 lbs.

LABEL: Flammable liquid

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Flammable Liquid



Skull and crossbones

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

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

FIRE: Yes **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes
CHRONIC: Yes

313 REPORTABLE INGREDIENTS: n-hexane (CAS 110-54-3), methyl alcohol (CAS 67-56-1), Cyclohexane (CAS 110-82-7)

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: To the best of our knowledge, this product is not listed as an extremely hazardous substance.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA RQ: Solvent naphtha, light aliphatic (CAS 64742-89-8) Reportable quantity: 66,667 lbs., Cyclohexane (CAS 110-82-7) Reportable quantity: 1,000 lbs., n-Hexane (CAS 110-54-3) Reportable quantity: 5,000 lbs, methyl alcohol (CAS 67-56-1) Reportable quantity: 5,000 lbs

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the State of California to cause cancer.: Benzene.

The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains the following substance(s) known to the State of California to cause reproductive harm.: Benzene.

CLEAN WATER ACT: Cyclohexane (110-82-7) Reportable quantity: 1,000 lbs. Under Section 311 of the Clean Water Act (CWA) this material is considered an oil. As such, spills into surface waters must be reported to the National Response Center at (800) 424-8802. The components with RQs are given for information.

GENERAL COMMENTS: The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

16. OTHER INFORMATION

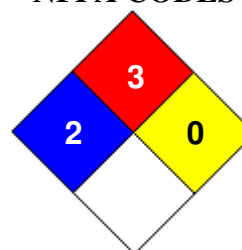
PREPARED BY: COMPLIANCE DEPT.

REVISION SUMMARY: New MSDS

HMIS RATING

HEALTH:	2
FLAMMABILITY:	3
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	H

NFPA CODES



HMIS RATINGS NOTES: The HMIS rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard.

To deal adequately with the safe handling of this material, all the information contained in the MSDS must be considered.

MANUFACTURER DISCLAIMER: The information contained herein is based on the data available to us and is believed to be accurate. However, Tarr Acquisition, LLC (Tarr, LLC) makes no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Tarr, LLC assumes no responsibility for injuries from the use of the product described herein.