SAFETY DATA SHEET

Date Prepared : 01/26/2009
MSDS No : CCC
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Revision No : 1

CARB CONCRETE CLEANER

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CARB CONCRETE CLEANER

MANUFACTURER
Tarr, LLC
P.O. Box 12570
Portland, OR 97212
Product Stewardship: 503-288-5294

24 HR. EMERGENCY TELEPHONE NUMBERS
CHEMTREC (US Transportation) :(800) 424 - 9300
CANUTEC (Canadian Transportation) :(613) 996 - 6666

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Flammable Liquids, Category 3

GHS LABEL


Flame


Health hazard

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H226: Flammable liquid and vapour.
H370: Causes damage to organs .

PRECAUTIONARY STATEMENT(S)

Prevention:

P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P270: Do not eat, drink or smoke when using this product.
P314: Get medical advice/attention if you feel unwell.
P240: Ground/bond container and receiving equipment.
P310: Immediately call a POISON CENTER or doctor/physician.
P102: Keep out of reach of children.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

EMERGENCY OVERVIEW

CARB CONCRETE CLEANER

PHYSICAL APPEARANCE: Clear, water-white liquid.

IMMEDIATE CONCERNS: WARNING! FLAMMABLE LIQUID AND VAPOR.CAUSES EYE AND SKIN BURNS, HARMFUL AND CORROSIVE IF SWALLOWED, HIGH VAPOR CONCENTRATIONS MAY CAUSE DROWSINESS AND IRRITATION OF THE EYES OR RESPIRATORY TRACT. PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE DRYING, CRACKING, OR IRRITATION.

POTENTIAL HEALTH EFFECTS

EYES: Material may cause severe eye irritation, experienced as discomfort or pain, excess blinking and tear production, marked excess redness and swelling of the eye and chemical burns to the cornea.

SKIN: Prolonged or repeated contact can result in the absorption of potentially harmful amounts of material Single exposure may cause local discomfort or pain, severe excess redness and swelling, tissue destruction, fissures, ulceration and possibly bleeding into the injured area.

INGESTION: Aspiration into the lungs may occur during ingestion or vomiting, resulting in lung injury. Causes severe irritation or chemical burns of the mouth, throat esophagus, and stomach, with pain or discomfort in the mouth, throat, chest and abdomen, nausea, vomiting, diarrhea, dizziness, drowsiness, thirst, faintness, weakness, circulatory collapse and coma. Irritating to the gastrointestinal tract, causing abdominal pain and vomiting, sometimes bloody. Ingestion may cause CNS depression, low blood pressure, rapid heart beat and liver damage.

INHALATION: May cause irritation of the respiratory tract, experienced as nasal discomfort and discharge, coughing and possibly accompanied by chest pain. Prolonged overexposure may cause injury to the respiratory tract.

MEDICAL CONDITIONS AGGRAVATED: 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.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Dipropylene glycol methyl ether	37 - 43	34590-94-8
Ethanol, 2-amino-	18 - 23	141-43-5
Aromatic Hydrocarbon	18 - 23	64742-94-5
Solvent Naphtha (Petroleum), Light Aromatic	18 - 23	64742-95-6

COMMENTS: Aromatic Hydrocarbon may contain the following constituents: Trimethylbenzene, 1,2,4,- (95-63-6) at 26% by weight and Naphthalene (91-20-3) at 3.5% by weight. Aromatic Petroleum Distillates contain the following constituents: Xylenes (1330-20-7) 1-3 % by weight, trimethylbenzene, 1,2,4,- (95-63-6) less 31-40% by weight and Cumene (98-82-8) less than 2% by weight.

4. FIRST AID MEASURES

EYES: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention without delay, preferably from an ophthalmologist.

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: Induce vomiting if large amounts are ingested. Consult a physician. Not expected to present a significant ingestion hazard under anticipated conditions of normal use.

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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.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE TOXICITY: 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 and cyanosis. Repeated overexposure may cause damage to kidneys and liver.

5. FIRE FIGHTING MEASURES

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

HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon and nitrogen. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.

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.

FIRE FIGHTING PROCEDURES: Clear fire area of unprotected personnel. Fire fighters should wear self contained breathing apparatus and other recommended protective equipment. Do not direct a solid stream of water or foam into burning molten material; this may cause spattering and spread the fire.

FIRE FIGHTING EQUIPMENT: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES: Avoid breathing vapor. Remove all sources of ignition and provide ventilation. Wear protective clothing as given in section 8. Dike area to contain spill. Take precautions as necessary to prevent contamination of ground and surface waters. Recover spilled material with absorbent, such as sawdust or vermiculite, and sweep into closed containers for disposal using non-sparking equipment. Do not flush to sewer. If area of spill is porous, remove as much contaminated earth and gravel, etc. as necessary and place in closed containers for proper disposal.

RELEASE NOTES: US regulations may require reporting releases of this material to the environment which exceed the reportable quantity to state and/or local authorities and/or the the National Response Center at (800) 424-8802.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Do not add nitrites or other nitrosating agents. A nitrosamine, which may cause cancer, may be formed. Minimum feasible handling temperatures should be maintained. Storage: Periods of exposure to high temperatures should be minimized. 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.

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

CARB CONCRETE CLEANER

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		SupplierOEL	
Chemical Name		**ppm**	**mg/m³**	**ppm**	**mg/m³**	**ppm**	**mg/m³**
Dipropylene glycol methyl ether	**TWA**	100	600	100	606		
	STEL			150	909		
Ethanol, 2-amino-	**TWA**	3 ppm [1]	6 mg/m3 [1]	3 ppm	7.5 mg/m3	NL ppm	NL mg/m3
	STEL	ppm	mg/m3	6 ppm	15 mg/m3	NL ppm	NL mg/m3
Aromatic Hydrocarbon	**TWA**					100	
Solvent Naphtha (Petroleum), Light Aromatic	**TWA**					50	

OSHA TABLE COMMENTS:
1. NL = Not Listed

ENGINEERING CONTROLS: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Process hazard: Sudden release of hot organic chemical vapor or mists from processes equipment operating at elevated temperature and pressure, or sudden ingress of air into hot equipment under a vacuum, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operation temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated-temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent), unless a full face piece respirator is worn. Do not wear contact lenses.

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, when airborne exposure guidelines and/or comfort levels may be exceeded, use an approved air-purifying respirator.

PROTECTIVE CLOTHING: Wear a PVC apron or full protective clothing when handling product and chemical resistant boots.

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: Avoid prolonged or repeated breathing of vapors.

COMMENTS: Consider the potential hazards of this material applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material the

personal protective equipment listed below is recommended. The user should read and understand all instructions supplied with the equipment since protections is usually provided for a limited time or under certain circumstances.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Aromatic hydrocarbon/mild ammoniacal odor.

COLOR: Colorless, clear to pale amber liquid.

pH: 6.5

FLASHPOINT AND METHOD: (131°F) TAG CC

FLAMMABLE LIMITS: 0.0001 to 0.14

VAPOR DENSITY: Heavier than air.

BOILING POINT: (300°F) to (420°F)

SOLUBILITY IN WATER: Miscible with most organic solvents, insoluble with water.

EVAPORATION RATE: Less than 1 (n-Butyl Acetate = 1)

DENSITY: 7.898

SPECIFIC GRAVITY: 0.89 to 0.995

10. STABILITY AND REACTIVITY

STABILITY: Avoid temperatures above 250 degrees C. May undergo self-sustaining thermal decomposition.

CONDITIONS TO AVOID: Avoid heat, sparks, flame and contact with strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and nitrogen. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Acute overexposures to the products of combustion may result in irritation of the respiratory tract.

11. TOXICOLOGICAL INFORMATION

ACUTE

SKIN ABSORPTION: Dipropylene glycol methyl ether: The LD50 for skin absorption in rabbits is greater than 20 ml/kg. Prolonged skin contact with very large amounts may cause drowsiness.

INHALATION LC_{50}: Significant laboratory data with possible relevance to human health hazard evaluation: Inhalation studies of monoethanolamine (MEA) in laboratory animals produced effects which suggest possible injury to the nervous system.

CHRONIC: 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.

CARCINOGENICITY

NTP: Solvent naphtha (petroleum), light aromatic is a complex stream of predominately C8 to C10 hydrocarbons; the exact composition and concentrations will vary. Contains naphthalene 0.3 - .10% weight. The National Toxicology Program (NTP) has reported a chronic inhalation study in rats of naphthalene, a minor component of this product. Naphthalene caused severe inflammation and an increase in tumors of the nasal epithelium in both sexes. NTP considered this to be clear evidence of carcinogenic activity of naphthalene in rats. The relevance to the inhalation toxicity of this product in humans is unknown. US NTP inhalation studies for 2-Butoxyethanol

found no evidence of cancer in rats. In mice, a small increase in tumors of the liver and the forestomach occurred, which are of uncertain relevance to man.

REPRODUCTIVE EFFECTS: Reproductive and Developmental Toxicity: Animal testing with light aromatic solvents demonstrated embryo/fetal effects but not malformations at concentrations producing maternal toxicity. A laboratory study suggests that rats given high doses of MEA by gavage produced increased embryofetal death, growth retardation and some malformations (hydronephrosis/hydroureter). Due to the high doses used and other technical deficiencies, the validity of this study is somewhat questionable. There is evidence that no embryofetotoxicity or teratogenicity was produced in rats or rabbits when MEA was administered by skin contact, a more relevant route of potential human exposure.

TARGET ORGANS: Dipropylene glycol methyl ether: SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Observations in animals include minor liver or kidney effects. Signs and symptoms of excessive exposure may be anesthetic or narcotic effects.

TERATOGENIC EFFECTS: Dipropylene glycol methyl ether: TERATOLOGY (BIRTH DEFECTS): Birth defects are unlikely. Exposures having no adverse effects on the mother should have no effect on the fetus.

MUTAGENICITY: Dipropylene glycol methyl ether: MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): Results of in vitro ("test tube") mutagencity tests have been negative.

COMMENTS: This product may contain benzene (CAS 71-43-2) at a concentration of less than 10 ppm.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: When released into the soil, this material may leach into groundwater.

AQUATIC TOXICITY (ACUTE): Monoethanolamine is toxic to aquatic life at relatively low concentrations in water. Laboratory tests indicate the Monoethanolamine is rapidly biodegraded at very low concentrations (about 10 ppm) in water. However, a large spill might be detrimental to aquatic life.

GENERAL COMMENTS: Avoid uncontrolled releases of this material. Keep out of sewers, storm drains, surface waters and soil. Where spills are possible, a comprehensive spill response plan should be developed and implemented.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Federal, state and local disposal laws and regulations will determine the proper waste disposal/recycling/reclamation procedure. Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected.

EMPTY CONTAINER: KEEP OUT OF REACH OF CHILDREN! Empty containers retain product residue and can be dangerous. Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. 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

CARB CONCRETE CLEANER

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Flammable Liquids, N.O.S.

TECHNICAL NAME: (naphtha solvent, dipropylene glycol monomethyl ether)

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: UN 1993

PACKING GROUP: II

NAERG: 128

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION

Flammable Liquid

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, and a fire hazard.

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

313 REPORTABLE INGREDIENTS: Xylenes (CAS 1330-20-7), Trimethylbenzene, 1,2,4,- (CAS 95-63-6), Cumene (CAS 98-82-8) and naphthalene.

302/304 EMERGENCY PLANNING

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

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All components of this product are on the TSCA inventory or are exempt from TSCA Inventory requirements under CFR 40 CFR 720.30.

16. OTHER INFORMATION

PREPARED BY: COMPLIANCE **Date-Revised:** 06/12/2015

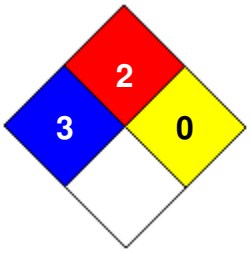
REVISION SUMMARY: This MSDS replaces the 01/28/2009 MSDS. Revised: **Section 1:** PREPARED BY, PRODUCT CODE. **Section 2:** EMERGENCY OVERVIEW - IMMEDIATE CONCERNS. **Section 16:** NFPA CODES (HEALTH, REACTIVITY).

CARB CONCRETE CLEANER

HMIS RATING

HEALTH	3
FLAMMABILITY	2
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 SDS must be considered. Personal protection rating to be supplied by user depending on use conditions.

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