MATERIAL SAFETY DATA SHEET

CAR DEGREASER

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MANUFACTURER: Tarr, LLC
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EMERGENCY PHONE: **CHEMTREC 800-424-9300 (US) Day or night**
International Call Collect CHEMTREC 202-483-7616

PRODUCT NAME: **CAR DEGREASER**

PRODUCT NUMBER: CD

UPC NUMBER:

PREPARED BY: Patricia Rodabaugh

DATE PREPARED: 5/5/2004

LAST REVISION: 5/5/2004

SYNONYMS:

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	80-86	50 ppm	50 ppm	
Isopropyl alcohol	67-63-0	14-20	400 ppm	400 ppm	

3. HAZARDOUS IDENTIFICATION

EMERGENCY OVERVIEW: DANGER! Extremely flammable liquid and vapor.

POTENTIAL HEALTH EFFECTS

EYE CONTACT: Can cause mild eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure eye tissue.

INHALATION: Breathing of vapor or mist is possible. Breathing small amounts of this material during normal handling is not likely to casue harmful effects. Breathing large amounts may be harmful. Symptoms usually occur at air concentrations higher than the recommended exposure limits.

INGESTION: Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

SKIN CONTACT: Liquid is mildly irritating to the skin. Prolonged or repeated liquid contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis. Passage of this material into the body through the skin is possible, but it is unlikely that this would reult in harmful effects during safe handling and use.

SIGNS AND SYMPTOMS OF EXPOSURE:

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 neurapathy 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 casue 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.

4. FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. If symptoms persist or there is any visual difficulty, seek medical attention.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Get medical attention immediately.

INGESTION: Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, meidcal facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

SKIN CONTACT: Remove contaminated clothing. Wash expose area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

AGGRAVATED MEDICAL CONDITIONS:

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to the material: respiratory tract, skin, lung (for example, asthma-like conditions), central nervous system, nervous system, male reproductive system.

SUPPLEMENTAL HEALTH INFORMATION:

* Note to physician: Inhalaiton 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 thims 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 Aggrevated Medical Conditions.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: <1 F **FLASH POINT METHOD USED:** Tag Closed Cup

AUTOIGNITION: NDA **LEL:** 0.02 **UEL:** 0.12

EXTINGUISHING MEDIA:

Use regular foam, dry chemical, or CO2.

SPECIAL FIRE FIGHTING PROCEDURES:

Water may be ineffective but can be used to cool containers exposed to heat or flame. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot burning liquid. Wear a selfcontained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemicals resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Material is highly volatile and redily gives off flammable 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.

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. Extremely 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:

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. All five-gallon pails and larger metal containers, including tank cars and tank trucks, should be grounded and/or bonded when matial is transferred. Hydrocarbon solvents are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering or pumping at high flow rates. if this charge reaches a sufficiently high level, sparks can form that may igninte the vapors of flammable liquids. Keep away from heat, sparks, and flame. Warning. Sudden release of hot organic chemical vapors or mistes from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as

safe operating temperatures in chemical processes without analysis of the actual process conditons. Any use of this product in elevated temrperature processes should be thoroughly evaluated to establish and maintain safe operation conditions. 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:

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

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 / 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 ventillation. Avoid breathing vapor. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

SOLUBILITY IN WATER: Insoluble in water.

APPEARANCE AND ODOR: Clear, colorless liquid with hydrocarbon odor.

BOILING POINT:	149 - 180 F	**PERCENT VOLATILE:**	100
VAPOR PRESSURE:	<50	**PH:**	N/A
EVAPORATION RATE:	Greater than 1 (n-Butyl Acetate = 1)	**MOLECULAR WEIGHT:**	
POUNDS PER GALLON:	5.75	**VAPOR DENSITY:**	Heavier Than Air
SPECIFIC GRAVITY:	0.689	**OTHER PROPERTIES:**	VOCs: 5.75 lb./gal.
MELTING POINT:	NDA		
FREEZING POINT:	NDA		

10. STABILITY AND REACTIVITY

STABILITY: Stable

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

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

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 nd nervous system damage. 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 finding sto humans is uncertain. Cancer Information: Based on the available inforamiton, this material cannot be classified with regard to carcinogenicity. This material is not listed as a carcinogen by the Internation Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.

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. (hexanes, ispropanol)	**PACKING GROUP:**	II
		GUIDE NUMBER:	128
HAZARD CLASS:	3	**DOT CLASS:**	Flammable liquids
UN NUMBER:	UN 1993		

15. REGULATORY INFORMATION

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

16. OTHER INFORMATON

HMIS INFORMATION: **HEALTH:** 2 **FLAMMABILITY:** 3 **REACTIVITY:** 0 **PROTECTIVE:** H

SARA Title III Information:

SARA 302:	To the best of our knowledge, this product is not listed as an extremely hazardous substance.
SARA 311/312:	This product should be reported as an immediate (acute) health hazard, delayed (chronic) health hazard, and a fire hazard.
SARA 313:	n-hexane (110-54-3)
Supplemental Health Info.:	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. 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 reproductive harm. BENZENE.
	RQ (reportable quantity) Hexane = 5,000 lbs. (49 CFR 172.101 and 40 CFR 302.4(a)).

N/A = Not Applicable
NDA = No Data Available

Disclaimer

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