

**MATERIAL SAFETY DATA SHEET**

Trade Name: Johnsens Non-chlorinated Brake Parts Cleaner (California)  
 MSDS NO: 2417  
 Revision Date: 01/30/2003

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Trade Name: Johnsens Non-chlorinated Brake Parts Cleaner (California)  
 Chemical Family: Non-Chlorinated Hydrocarbon  
 Synonyms: None  
 Emergency Telephone (24 hr.): 24-Hour Emergency Information: CHEMTREC (800) 424-9300

Supplier: Technical Chemical Company, P.O. Box 139, Cleburne, Texas 76033

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredient/CAS No.	wt. %	OSHA PEL TWA	OSHA PEL Ceiling Limits	ACGIH TLV TWA	ACGIH TLV STEL
Acetone 67-64-1	45-55	1000 ppm	750 ppm	500 ppm	750 ppm
Toluene 108-88-3	20-30	100 ppm	150 ppm	100 ppm	150 ppm
Methanol 67-56-1	20-30	200 ppm	Not Known	200 ppm	250 ppm
Carbon Dioxide 124-38-9	5-15	5000 ppm (exposures <10,000 ppm to be cited as minimus)	Not Known	5000 ppm	30,000 ppm

This product does not contain Normal Hexane (N-Hexane).

**3. HAZARDS IDENTIFICATION**

Emergency Overview: Danger: Poison. Extremely Flammable. Content under pressure. Ingestion of even small amounts of methyl alcohol can cause blindness and death. This material is an eye and skin irritant. Harmful if absorbed through the skin. Keep away from heat, sparks and flame. Gross inhalation overexposure may cause: respiratory track irritation, kidney damage, blood, liver damage, lung damage and central nervous system depression.

**4. FIRST AID MEASURES**

**Eye Contact:** In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.  
**Ingestion:** If swallowed, do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than hips to prevent aspiration.  
**Inhalation:** If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.  
**Skin Contact:** In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.

**5. FIRE FIGHTING MEASURES**

**Flammable Properties**  
**Flash Point °F(°C):** -20 F (Lowest Component)  
**Flash Point Method:** TAG Closed Cup  
**Flammable Limits in Air - Lower (%):** 2.5% (Lowest Component)  
**Flammable Limits in Air - Upper (%):** 12.8% (Lowest Component)  
**Autoignition Temperature °F(°C):** 725 F (Lowest Component)  
**Extinguishing Media:** Dry chemical, Carbon dioxide, Alcohol foam. Use water spray to keep containers cool that are exposed to heat or flames.  
**Protection Of Fire-Fighters:**  
**Special Fire-Fighting Procedures:** Wear approved positive-pressure self-contained breathing apparatus and protective clothing. Vapor may cause flash fire.  
**Hazardous Combustion Products:** Carbon Dioxide, Carbon Monoxide, Formaldehyde.  
**Aerosol Comments:** NFPA Level 2 Aerosol

**6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions: Wear appropriate protective clothing and equipment to prevent skin and eye contact.

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**Spill Procedures:** Contain any liquid from leaking containers. Avoid all sources of ignition; heat, sparks and open flames. Do not puncture or incinerate container. Contents under pressure. Wear proper protective equipment as specified in the protective equipment section. Remove sources of ignition. Leaking containers should be removed to an isolated, well-ventilated area and transferred to other suitable containers. Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal. Persons not trained should evacuate area.

**Environmental Precautions:** Do not allow to enter sanitary drains, sewer or surface and subsurface waters. Keep out of lakes, ponds or streams.

**7. HANDLING AND STORAGE**

**Handling and Storage:** Caution: Contents under pressure. Keep away from heat and open flame. Use only in a well ventilated area. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Avoid contact with skin and eyes. Do not puncture, incinerate or store above 120 F. Exposure to high temperatures may cause bursting. DO NOT store in the passenger compartment of an automobile.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Engineering Controls:** Use in a well ventilated area. Local exhaust ventilation as necessary to maintain exposures to within applicable limits. Eyewash stations, Showers.

**Eyes:** Chemical goggles; also wear a face shield if splashing hazard exists.

**Skin Protection:** Avoid skin contact. Wear protective clothing and gloves.

**Respiratory Protection:** Do not breath mist or vapor. Use in a well ventilated area. Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Colorless to pale yellow liquid	<b>pH Value:</b>	Not Determined
<b>Odor:</b>	MILD	<b>Vapor Density (Air=1):</b>	Approximately 2.0
<b>Vapor Pressure:</b>	Not Determined	<b>Melting/Freezing Point:</b>	< -110 F.
<b>Boiling Point (°F):</b>	133 F (Lowest Component)	<b>Bulk Density at 20°C:</b>	Not Determined
<b>Solubility in Water:</b>	64 %	<b>Evaporation Rate:</b>	Not Determined
<b>Molecular Weight:</b>	Mixture	<b>Specific Gravity (H2O=1):</b>	.81 @ 68 F.
<b>Viscosity:</b>	Not Determined.	<b>Decomposition Temperature:</b>	Not Determined
<b>VOC Content(%):</b>	44.9 %.		

**10. STABILITY AND REACTIVITY**

**Chemical Stability:** Stable under normal conditions of handling, use and transportation.

**Conditions to Avoid:** Keep away from heat, sparks and flame. Avoid any source of ignition. Do not expose to heat or store at temperatures above 120 F.

**Materials to Avoid:** Nitric acid, Sulfuric Acid, Strong acids. Contact with oxidizing agents. Chlorine compounds, Alkalis, Potassium t-butoxide, Beryllium Dihydride, Magnesium, Nitrogen Tetraoxide, Strong bases. Methanol has an explosive reaction with chloroform + sodium methoxide and diethyl zinc. Methanol has a violent reaction with alkyl aluminum salts, acetyl bromide, chloroform + sodium hydroxide, cyanuric chloride, nitric acid, etc.

**Hazardous Decomposition Products:** Carbon monoxide, Carbon dioxide, Formaldehyde.

**Hazardous Polymerization:** WILL NOT OCCUR

**11. TOXICOLOGICAL INFORMATION**

**Toxicological Data:**

Ingredient/CAS No.	wt. %	Route	Species	Dose
Acetone 67-64-1	45-55	Inhalation	Rats	LC50 50100 mg/m3/8H
Toluene 108-88-3	20-30	Inhalation	Rats	LC50 49 gm/m3/4H
Methanol 67-56-1	20-30	Inhalation	Rats	LC50 64,000 ppm
Carbon Dioxide 124-38-9	5-15	NA	NA	Not known.

**Carcinogenicity:**

Ingredient/CAS No.	wt. %	IARC	NTP	OSHA
Acetone 67-64-1	45-55	Not Listed	Not Listed	Not Listed
Toluene 108-88-3	20-30	Group 3 (not classifiable)	Not Listed	Not Listed

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Methanol 67-58-1	20-30	Not Listed	Not Listed	Not Listed	Not Listed
Carbon Dioxide 124-38-9	5-15	Not Listed	Not Listed	Not Listed	Not Listed

**12. ECOLOGICAL INFORMATION**

Ecological testing has not been conducted on this product.

**13. DISPOSAL CONSIDERATION**

**Waste Classification:** Residues and spilled material are hazardous waste due to ignitability.

**Waste Management:** Not determined.

Disposal should be made in accordance with federal, state and local regulations.

**14. TRANSPORTATION INFORMATION**

**U.S. DOT:**

**Proper Shipping Name:** ORM-D CONSUMER COMMODITY  
**Hazard Class:** ORM-D  
**UN/NA Number:** Not Applicable  
**DOT Packing Group:** Not Applicable

**IMDG:**

**Proper Shipping Name:** Aerosols (Limited Quantity)  
**Hazard Class:** 2.1  
**Hazard Subclass:** Not determined.  
**UN No.:** UN1950  
**Packing Group:** Not Applicable.  
**Marine Pollutant:** No

**15. REGULATORY INFORMATION**

**US Federal Regulations:**

Ingredient/CAS No.	wt. %	SARA 313	SARA 302	RQ	TPQ
Acetone 67-64-1	45-55	Not Listed	Not Listed	NA	NA
Toluene 108-88-3	20-30	Listed	Not Listed	1000 lbs.	NA
Methanol 67-56-1	20-30	Listed	Not Listed	NA	NA
Carbon Dioxide 124-38-9	5-15	Not Listed	Not Listed	NA	NA

Hazardous per OSHA 29 CFR 1910.1200

**SARA 311/312 Hazard Categories:** Not Determined.

**State Regulations:**

Ingredient/CAS No.	wt. %	California Prop. 65 Cancer list	California Prop. 65 Developmental Toxicity	California Prop. 65 Reproductive Female	California Prop. 65 Reproductive Male
Acetone 67-64-1	45-55	Not Listed	Not Listed	Not Listed	Not Listed

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Toluene 108-88-3	20-30	Not Listed	Listed, Developmental: toxicity:initial date 1/1/91	Not Listed	Not Listed	Not Listed
Methanol 67-56-1	20-30	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Carbon Dioxide 124-38-9	5-15	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed

**U.S. TSCA:** The components of this product are listed on the TSCA Inventory.

**16. OTHER INFORMATION**

**General Notes:** Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

**Disclaimer:**

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