MATERIAL SAFETY DATA SHEET

Trade Name: Johnsens Silicone DOT 5 Brake Fluid
MSDS NO. 7012-6
Revision Date: 04/01/2003

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Johnsens Silicone DOT 5 Brake Fluid
Chemical Family: SILICONE FLUID
Synonyms: None
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300 During normal business hours CST 817-645-6088.

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 TLW STEL
Polydimethylsiloxane (modified) 63148-62-9	90-100	None Established	None Established	None Established	None Established
Tributyl Phosphate 126-73-8	1-10	5 mg/m2 TWA	None Established	None Established	None Established

3. HAZARDS IDENTIFICATION

Emergency Overview: Causes severe eye irritation. Will damage tissue. This material is a skin irritant. This product contains dimethylpolysiloxane which can generate small amounts of formaldehyde as a byproduct of oxidative thermal decomposition beginning at approximately 150 C (300 F). Exposure to formaldehdye can cause adverse effects such as skin and respiratory sensitization and eye and throat irritation. Formaldehyde is a potential cancer hazard. Use good industrial hygiene practices to evaluate and control exposure to formaldehyde when warranted by conditions of use.

4. FIRST AID MEASURES

Eye Contact: Immediately absorb excess with clean absorbent cloth or cotton. Immediately flush eyes with large amounts of water for at least 15 minutes. If irritation or redness persists or signs of toxicity occur, seek medical attention.

Ingestion: If victim is conscious and alert, give 1-2 glasses of water to drink. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.

Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Skin Contact: For skin contact, wipe away excess material with dry towel. Then wash affected areas with plenty of water, and soap if available, for several minutes. Get medical attention if irritation occurs.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point °F(°C): 206 C (402 F)
Flash Point Method: TAG Closed Cup
Flammable Limits in Air - Lower (%): Not Determined
Flammable Limits in Air - Upper (%): Not Determined
Autoignition Temperature °F(°C): Not Determined
Extinguishing Media: Dry chemical. Foam. Carbon dioxide.

Protection Of Fire-Fighters:

Special Fire-Fighting Procedures: Wear approved positive-pressure self-contained breathing apparatus and protective clothing.
Hazardous Combustion Products: Oxides of Carbon. Formaldehyde. Silica (crystalline)
Aerosol Comments: Not Applicable

6. ACCIDENTAL RELEASE MEASURES

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

Spill Procedures: Ventilate spill area. Soak up material with absorbent and place in chemical waste container. Clean up residual material with an appropriate solvent like paint thinner or mineral spirits, provided that there is good ventilation and no sources of ignition.
Wash walking surfaces with detergent and water to reduce slipping hazard.

Environmental Precautions: Do not allow to enter sanitary drains, sewer or surface and subsurface waters.

7. HANDLING AND STORAGE

Handling and Storage: Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Avoid contact with skin and eyes. Store at tempertures between 41 - 77 F. Store tightly closed containers in cool,dry place. Use in a well ventilated area to prevent irritation by vapors.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Exhaust ventilation. Showers. Eyewash stations.
Eyes: Wear safety glasses or goggles to protect against exposure.
Skin Protection: Avoid skin contact. Wear protective clothing and gloves.
Respiratory Protection: Use an approved NIOSH organic vapor respirator below the TLV. If TLV is exceeded or overexposure is likely, use positive pressure or self contained breathing apparatus. Check exposure limit guidelines for formaldehyde, a byproduct of oxidative thermal decomposition of dimethylsiloxane, if this product is handled above 150 C (300 F).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Purple viscous liquid.		
Odor:	ODORLESS	**pH Value:**	Not Determined
Vapor Pressure:	<.1 mmHg @ 20 C.	**Vapor Density (Air=1):**	Not Determined
Boiling Point (°F):	Not determined.	**Melting/Freezing Point:**	Not determined.
Solubility in Water:	INSOLUBLE	**Bulk Density at 20°C:**	Not Determined
Molecular Weight:	Mixture	**Evaporation Rate:**	Not Determined
Viscosity:	42-43 cs @ 25 C.	**Specific Gravity (H20=1):**	.958 @ 25 C.
VOC Content(%):	Not determined.	**Decomposition Temperature:**	Not Determined

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 combustible materials.
Materials to Avoid: Strong acids and bases Strong oxidizing agents.
Hazardous Decomposition Products: Formaldehyde. Dimethylcyclosiloxanes and methylphenylcyclosiloxanes.
Hazardous Polymerization: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Ingredient/CAS No.	wt. %	Route	Species	Dose
Polydimethylsiloxane (modified) 63148-62-9	90-100	Oral	Rats	LD50 >17 gm/kg
Tributyl Phosphate 126-73-8	1-10	Inhalation	Rats	LC50 28 gm/m3/1H, LD50 3 gm/kg

Carcinogenicity:

Ingredient/CAS No.	wt. %	IARC	NTP	OSHA
Polydimethylsiloxane (modified) 63148-62-9	90-100	Not Listed	Not Listed	Not Listed
Tributyl Phosphate 126-73-8	1-10	Not Listed	Not Listed	Not Listed

Under certain conditions, this product may generate formaldehyde as a byproduct of oxidative thermal decomposition. Formaldehyde is listed as a potential human carcinogen by IARC, OSHA and ACGIH.

12. ECOLOGICAL INFORMATION

Ecological testing has not been conducted on this product.

13. DISPOSAL CONSIDERATION

Waste Classification: Not an EPA hazardous Waste.

Waste Management: Recovery and reuse, rather than disposal, should be the ultimate goal of handling efforts.

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

14. TRANSPORTATION INFORMATION

U.S. DOT:

Proper Shipping Name:	Not Regulated
Hazard Class:	Not Applicable
UN/NA Number:	Not Applicable
DOT Packing Group:	Not Applicable

IMDG:

Proper Shipping Name:	Not Regulated
Hazard Class:	Not Applicable
Hazard Subclass:	Not Applicable
UN No.:	Not Applicable
Packing Group:	Not Applicable
Marine Pollutant:	Not Determined.

15. REGULATORY INFORMATION

US Federal Regulations:

Ingredient/CAS No.	wt. %	SARA 313	SARA 302	RQ	TPQ
Polydimethylsiloxane (modified) 63148-62-9	90-100	Not Listed	Not Listed	NA	NA
Tributyl Phosphate 126-73-8	1-10	Not Listed	Not Listed	NA	NA

SARA 311/312 Hazard Catagories: 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
Polydimethylsiloxane (modified) 63148-62-9	90-100	Not Listed	Not Listed	Not Listed	Not Listed
Tributyl Phosphate 126-73-8	1-10	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.

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