
Ingredients	CAS No.	% by weight
Diatomaceous Earth, Flux Calcined	68855-54-9	<30
Cristobalite	14464-46-1	<30
Tetrapropyl orthosilicate	682-01-9	< 10
Alumina Hydrate	21645-51-2	< 10
Octamethylcyclotetrasiloxane	556-67-2	< 1
Quartz	14808-60-7	< 10

4. First Aid Measures

Ingestion: DO NOT INGEST. If ingested get medical attention.
Inhalation: if symptoms are experienced, remove victim to fresh air. If symptoms persist, seek medical attention.

Skin Contact: no health affects expected. If irritation does occur, flush with lukewarm, gently flowing water for 5 minutes. If irritation persists, obtain medical advice.

Eye Contact: If irritation does occur, flush eyes with lukewarm, gently flowing water for 5 minutes. If symptoms persist, seek medical attention.

5. Fire Fighting Measures

Recommended Extinguishing Agent:
Dry Chemical, Carbon Dioxide

Special Fire Fighting Procedures:
Self contained breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. (Professionally Trained Personnel).

Hazardous Products Formed by Fire or Thermal Decomposition:
Thermal breakdown during a fire can evolve the following decomposition products: Carbon Oxides and traces of incompletely burned carbon compounds. Silicon Dioxide, Quartz, Formaldehyde, Metal Oxides.

Unusual Fire or Explosion Hazards: None

Compressed Gases: None
Pressure at Room Temperature: Does not apply

6. Accidental Release Measures

Steps to be taken in cases of spill or leak:
Wear proper personal protective equipment. Remove any sources of ignition from the area and allow hot surfaces to cool. Return uncontaminated material to container and seal container tightly. May present a slip hazard, clean up with a suitable absorbant. Dispose of contaminated material or waste.

7. Handling and Storage

Storage: Cool, dry, storage away from water and moisture. Keep out of reach of children. Store in closed containers.

Handling: Avoid contact with skin and eyes. Do not breathe heated vapors, do not take internally. This product in its purchased form does not create an inhalation hazard from dust. If grinding or sanding or any other process is performed to this compound when cured, will cause airborne particles wear appropriate respirator to avoid breathing any dust or vapors. Wear appropriate safety gear as required in work area.

8. Exposure Controls / Personal Protection

Exposure Limits Ingredients	ACGIH (TLV)	OSHA (PEL)	OTHER
Diatomaceous Earth, Flux Calcined	May contain silica quartz (see quartz below)		
Cristobalite	0.05 mg/m3 (respirable)	0.025 mg/m3 (respirable)	
Tetrapropyl orthosilicate	10 ppm TWA	100 ppm TWA	
Quartz	0.1 mg/m3 (respirable)	0.025 mg/m3 (respirable)	
Alumina Hydrate	10 mg/m3 TWA	15 mg/m3 total dust 5 mg/m3 Resp. Fraction	
Octamethylcyclotetrasiloxane			10 ppm TWA

Items below are not ingredients but possible by-products:

Formaldehyde (When heated to temperatures above 180 C in the presence of open air, product can form formaldehyde vapors.)
Formaldehyde is a potential cancer causer and a known skin and respiratory sensitizer.

Formaldehyde	1 ppm TWA	.75 ppm TWA 2 ppm STEL
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n-Propyl alcohol is formed upon contact with water or humid air. Provide adequate ventilation to control exposure within guidelines of OSHA PEL (final rule) : TWA 200 ppm, STEL 250 ppm ACGIH TLV: TWA 100 ppm

Personal Protective Equipment (PPE)

Eyes: Safety Glasses
Full face shield recommended. (during injection process)

Skin: Chemical resistant gloves

Respiratory Protection: NIOSH approved air purifying respirator with an organic vapor cartridge or canister may be permissible under circumstances where airborne concentrations are expected to exceed exposure limits.

Other Protective Clothing or Equipment:

Coveralls or other protective clothing. Safety equipment as required in area.

Work / Hygienic Practices:

Avoid contact with skin and eyes. Avoid breathing vapors. Wash hands before eating.

Engineering Controls : Ventilation: Local exhaust if poorly ventilated area or in confined spaces.
General ventilation recommended.

NOTE: THIS PRODUCT IN ITS PURCHASED FORM DOES NOT PRESENT AN INHALATION HAZARD FROM DUST, AS IT IS A LIQUID, DUST IS NOT AIRBORN UNDER NORMAL HANDLING.

9. Chemical and Physical Properties

Appearance: white liquid
Odor: slight odor
pH: Not Determined
Solubility in Water: Not Determined
Specific Gravity: 1.14 (H₂O =1)
Evaporation Rate: Not Applicable
Boiling Point: >65 C
Melting Point: Not Applicable
Vapor Pressure: Not Applicable
Vapor Density: Not Established
VOC Content: None

Flash Point: >100 C. (closed cup)

Flammable Limits:

LEL: Not Established
UEL: Not Established

10. Stability and Reactivity

Stability: Stable
Hazardous Polymerization: Will not occur
Hazardous Decomposition Or By-Products: Thermal breakdown during a fire can evolve the following decomposition products: Silicon Dioxide, Formaldehyde, Metal Oxides, Quartz. Carbon Oxides and traces of incompletely burned carbon compounds.
Incompatibility: Strong Oxidizers and Some Acids

11. Toxicology Information

Primary Routes of Entry: Inhalation and skin contact.
Signs and Symptoms of Overexposure: **Inhalation:** Irritates respiratory passages very slightly
Eyes: Direct contact may cause temporary redness and discomfort
Skin : None Known
Ingestion: None Known

Existing Conditions Aggravated by Exposure: None Known

Carcinogenicity

NTP: Crystalline Silica, respirable size (Cristobalite and Quartz) Known to be a Carcinogen
IARC: Silica Dust in form of Cristobalite and Quartz, Group 1 IARC
OSHA Regulated: NO
Toxicity : Octamethylcyclotetrasiloxane LD50 Oral >4800 mg/kg (Rat) LD50 Dermal 2.5 mg/kg (rabbit)
LC50 Inhalation 2976 ppm (rat, 4 hr vapor)
Alumina Hydrate LD50 Oral >5000 mg/kg (rat)

Acute Health Hazards: **Skin:** Possible irritation.
Inhalation: Irritates respiratory passages very slightly
Eyes: Direct contact may cause temporary redness and discomfort

Chronic Health Hazards: Skin: Repeated or prolonged exposure may cause irritation.
Ingestion: repeated ingestion and swallowing large amounts may injure internally
Inhalation: repeated or prolonged exposure by inhalation may injure internally
see **NOTE** below.

NOTE: THIS PRODUCT IN ITS PURCHASED FORM DOES NOT PRESENT AN INHALATION HAZARD FROM DUST, AS IT IS A LIQUID, DUST IS NOT AIRBORN UNDER NORMAL HANDLING.

. 12. Ecological Information

In soil siloxanes are degraded. No bioaccumulation potential. Siloxanes are removed from water by sedimentation or binding to sewage sludge. No other information is available

13. Disposal Considerations

Recommended Methods of Disposal:
RCRA 40 CFR 261 Classification : This product as purchased does not fall under current US EPA RCRA definitions of Hazardous Waste.
Certain state regulations could affect whether a material is considered a hazardous waste upon disposal. It must also be noted that a material can become a hazardous waste if it is mixed with or comes in contact with a hazardous substance during use. Under RCRA it is the responsibility of user of a product to determine at the time of disposal, whether a material should be classified as a hazardous waste.

14. Transport Information

DOT (49 CFR 172): Not Regulated

IATA : Not Regulated

Liquid / Solid (per ASTM D 4359-90) : Material is a Liquid

15. REGULATORY INFORMATION

CERCLA HAZARDOUS SUBSTANCES (40 CFR Part 302.4): None

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR Part 355): This product does not contain any SARA 302 Extremely Hazardous Substances.

SARA TITLE III SECTION 311/312 HAZARDOUS CATEGORIZATION (40 CFR Part 370): Certain ingredients of this product are regulated under Sara Title III Section 311/312, see section 3 of this MSDS.

SARA TITLE III SECTION 313 (40 CFR Part 372): None

U.S. INVENTORY (TSCA): Any chemical substances (as defined in 40 CFR Part 710.2), that are contained in, or used in the manufacture of this product, are reported in the EPA TSCA Inventory. (As required per 40 CFR 710.3)

CALIFORNIA PROPOSITION 65: Crystalline Silica (Cristobalite and Quartz)
Formaldehyde (When heated to temperatures above 180 C in the presence of open air, product can form formaldehyde vapors.) **Not an ingredient, but a possible by-product**

EUROPEAN UNION :

Alumina Hydrate : CLP eye irritant 2, Skin Irritant 2 STOT SE3 respiratory.

Diatomaceous Earth, Flux Calcined: CLP STOT RE1

Cristobalite : CLP STOT RE2

Tetrapropyl orthosilicate: CLP Skin Irritant 2, Eye Irritant 2

Quartz : CLP STOT RE2

Octamethylcyclotetrasiloxane: CLP Repr 2, Aquatic Chronic 4

Items below are not ingredients but possible by-products:

Formaldehyde (When heated to temperatures above

180 C in the presence of open air, product can form formaldehyde vapors.) : CLP Acute Tox 3, Carc.2

n-Propyl alcohol is formed upon contact with water or humid air. : CLP Flam Liquid 2, Eye Damage 1, STOT SE3

CANADA WHMIS: Ingredient Disclosure List : : Crystalline Silica, quartz -- Crystalline Silica, Cristobalite, Diatomaceous Earth, Flux Calcined

Formaldehyde (When heated to temperatures above 180 C in the presence of open air, product can form formaldehyde vapors.) **Not an ingredient, but a possible by-product** n-Propyl alcohol is formed upon contact with water or humid air

Not an ingredient, but a possible by-product

WHMIS Classification: Crystalline Silica, quartz., D2A, Crystalline Silica, Cristobalite D2A, Diatomaceous Earth D2A

OZONE DEPLETERS: * This product is not manufactured with or contains any Class I or Class II Ozone Depleting Chemicals. (ODC's)

16. OTHER INFORMATION

The information contained in this MSDS sheet is based upon data supplied by our suppliers and data determined by us in our facilities at the time these products were formulated. We have reviewed any information that we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety data in this sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. If after reviewing this MSDS you have determined that this product poses unusual risks to you, your plant, or your plant personnel, or if you cannot comply fully with all safety recommendations, do not use this product. This product is intended for a temporary repair. The responsibility for whether or not the product is suitable for use rest solely with the purchaser. We recommend that the product be tested prior to use. Your use of this information is beyond our control, therefore, the information is provided without warranty expressed or implied. We accept no liability beyond the purchase price of the material.

Estimated HMIS® Code:

Health Hazard:	1
Flammability Hazard:	1
Physical Hazard:	0
Personal Protection:	NPCA recommends that PPE codes be determined by the employer, who is familiar with the actual conditions under which chemicals in the facility are used.

Attn: Technician

(For industrial use by professionally trained personnel only) If being injected, steps should be taken to insure that the injection pressure in conjunction with pressure that may occur from gassing off of the compound does not exceed the pressure limitations of the piping system. If the compound is gassing off, gasses should be vented. Also, be aware it is quite common that the application temperature will exceed the compound flash point. Be aware of the possibility of a flash and take necessary precautions. See section 8 of SDS for personal protective equipment. Ventilation may be needed during heating/curing stage to exhaust organic vapors resulting from vaporization of certain organic agents. Always avoid direct contact with heated vapors being emitted from the compound. These vapors may be irritating to the skin, eyes and respiratory system. Read product technical data and safety information before use.

PREPARATION INFORMATION

Prepared By:	Safety Department
Company:	Jet-Lube LLC / Deacon
Revision Date:	05-01-15 Revision: A