

3. Composition / Information on Ingredients

Ingredients	CAS No.	% by weight
Binder Base *	Mixture	20-50
Aluminosilicate	142844-00-6	1-20
Kaolin	1332-58-7	20-50
Aluminum	7429-90-5	<5
Natural Graphite	7782-42-5	1-20
Titanium Dioxide	13463-67-7	<1

*Binder is practically non-toxic and non-irritating. However with any petroleum product, avoid prolonged or repeated skin contact.

4. First Aid Measures

Ingestion: DO NOT INGEST. Oral toxicity not determined.
Call a physician or get medical help immediately.

Inhalation: Remove to fresh air. If symptoms persist,
seek medical attention.

Skin Contact: Wash with soap and water, consult physician if
rash develops.

Eye Contact: Flush with water 15 minutes. If symptoms persist,
seek medical attention.

5. Fire Fighting Measures

Recommended Extinguishing Agent:
Foam, Dry Chemical, Carbon Dioxide, Water Fog

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:
CO, CO₂, Aluminum Oxide, noxious or toxic fumes some of which may be irritating

Unusual Fire or Explosion Hazards:
Closed containers may rupture when exposed to extreme
heat or fire conditions

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 metal container and seal container tightly.
Dispose of contaminated material or waste. Clean up with mineral spirits.

7. Handling and Storage

Storage: Cool, dry, storage. Store in closed containers.
Avoid contamination from water.

Handling: Avoid contact with skin and eyes. Do not breathe heated vapors. This
product in its purchased form does not create an inhalation hazard
from fibers or dust. If grinding or sanding or any other process is
performed to this compound 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
Binder Base	Not Established	Not Established	
Aluminosilicate (respirable ceramic fibers)	0.2 f/cc TLV, 8 hr, TWA	0.5 f/cc, 8 hr. TWA* * (Manufacturer Recommendation) (California PEL is 0.2 f/cc, 8 hr TWA)	
Kaolin	2 mg/m3 (resp. fraction)	5 mg/m3 (resp. fraction)	
Aluminum	1 mg/m3 8 hrs Form : Respirable Fraction	5 mg/m3 (as Al) 8 hours Form: Respirable Fraction 15 mg/m3 (as Al) 8 hours Form : Total Dust	
Natural Graphite Titanium Dioxide	2.0 mg/m3 TWA Respirable Dust 10mg/m3 TWA	N/E 15mg/m3	3 mg/m3 for nuisance dust

Personal Protective Equipment (PPE)

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

Skin: Chemical resistant gloves.

Respiratory Protection: NIOSH approved for organic vapors and dust.

Other Protective Clothing or Equipment:

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

Work / Hygienic Practices: Avoid contact with skin. Wash hands before eating.

Engineering Controls : Ventilation: Local exhaust if poorly ventilated area or in confined spaces.
Ventilation should be provided during heat up to exhaust organic vapors
resulting from vaporization of certain organic agents

9. Chemical and Physical Properties

Appearance: Gray putty-like compound

Odor: Faint Odor

pH: 6.9

Solubility in Water: NIL

Specific Gravity: 1.75 (compressed) (H₂O =1)

Evaporation Rate: Not Applicable

Boiling Point: Not Applicable

Melting Point: Not Applicable

Vapor Pressure: Not Established

Vapor Density: Not Established

VOC Content: less than 1%

Flash Point: over 400⁰ F. Method: Cleveland Open 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: CO, CO₂, Aluminum Oxide, noxious or toxic fumes some of which may be irritating

Incompatibility: Strong Oxidizers and Strong Acids, Mineral Acids, Halogenated Hydrocarbons,
Strong Alkalies

11. Toxicology Information

Primary Routes of Entry: Inhalation and contact.
 Signs and Symptoms of Overexposure: **Inhalation:** Possible dizziness or headaches, respiratory irritation. **Eyes:** Redness and irritation.
Skin: Chemical dermatitis, redness and itching.

Existing Conditions Aggravated by Exposure: Pre-existing skin condition if prolonged exposure to skin. (Wear chemical resistant gloves) Respiratory disorders, asthma, chronic emphysema, heart condition (if prolonged and continuous exposure to dust or heated vapors).
 Dust exposure is not a hazard with this product under normal use.
 Product is in a putty-like form. (Organic vapors , Wear recommended respirator if exceeding permissible exposure limit, see section 8)

Carcinogenicity

NTP: Ceramic Fibers, (respirable size) Reasonably Anticipated to be a Carcinogen

IARC: Titanium Dioxide, Group 2B IARC
 Ceramic Fibers, (respirable size) 2B

OSHA Regulated: NO
 Toxicity : Mixture, Not Determined

Acute Health Hazards: **Skin:** Contact on bare skin can cause chemical dermatitis, redness, itching
Inhalation: Breathing excessive vapors may cause dizziness or headaches irritation of eyes, nose, throat, lungs and can cause central nervous system depression.

Chronic Health Hazards: **Inhalation:**
 Carcinogen. Ceramic Fibers, NTP Reasonably Anticipated to be a Carcinogen.
 (Wear recommended respirator if exceeding permissible exposure limit, see section 8)

See note below.

NOTE: THIS PRODUCT IN ITS PURCHASED FORM DOES NOT PRESENT AN INHALATION HAZARD FROM FIBERS OR DUST, AS IT IS A PUTTY-LIKE COMPOUND. FIBERS AND DUST ARE NOT AIRBORN UNDER NORMAL HANDLING.

12. Ecological Information

None Known

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 solid

15. REGULATORY INFORMATION

CERCLA HAZARDOUS SUBSTANCES (40 CFR Part 302.4): This product is not reportable under 40 CFR Part 302.4.

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): Aluminum (fume, dust),

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: Aluminosilicate (ceramic fibers), Titanium Dioxide (airborne particles of respirable size) does not cover titanium dioxide when it is bound within a product matrix. (see NOTE below)

CANADA WHMIS: Ingredient Disclosure List: RCF (Aluminosilicate), Aluminum, Titanium Dioxide
WHMIS Classification : RCF (Aluminosilicate) D2A, Aluminum B6, Titanium Dioxide D2A

EUROPEAN UNION : Aluminosilicate (ceramic fibers): CLP Carc 1B , Natural Graphite: CLP STOT SE3,
Titanium Dioxide: CLP Acute Tox 4, Carc. 2
Aluminum: CLP Flam Solid 1- Water React 2, Kaolin : CLP STOT SE3

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

NOTE: THIS PRODUCT IN ITS PURCHASED FORM DOES NOT PRESENT AN INHALATION HAZARD FROM FIBERS OR DUST AS IT IS A PUTTY-LIKE COMPOUND. FIBERS AND DUST ARE NOT AIRBORN UNDER NORMAL HANDLING.

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 rests 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*	* See section 11 for chronic effects.
Flammability Hazard:	1	
Physical Hazard:	1	

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.

Procedural Warning:

Attn: Technician

(For industrial use by professionally trained personnel only) When the compound is curing, vapors and gasses are given off and should be vented. Steps should be taken to insure that the injection pressure in conjunction with pressure that may occur from gassing off does not exceed the pressure limitations of the piping system. 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. Avoid contact with skin and eyes. 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 smoke and vapors being emitted from the compound during the heating/curing process. 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
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