

Ingredients	CAS No.	% by weight
PTFE (Polytetrafluoroethylene)	9002-84-0	1-20
Fluid Binder*	Proprietary	25-50
Titanium Dioxide	13463-67-7	less than 1%
Inert Filler	Proprietary	25-50
Natural Graphite	7782-42-5	1-10

*Non- Hazardous per OSHA 29 CFR 1910.1200

4. First Aid Measures

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

Inhalation: Not an inhalation risk unless dust is created or if product is overheated.
Avoid heating above recommended temperature limit.
Do not exceed 260 C. (500 F)

Skin Contact: Wash with soap and water, consult physician if
irritation 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, Hydrogen Fluoride, Carbonyl Fluoride, acid fluorides.

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.
Dispose of contaminated material or waste. Clean up with mineral spirits.

7. Handling and Storage

Storage: Cool, dry, storage. Store in closed containers

Handling: Avoid contact with skin and eyes. 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.
Do not exceed 260 C. (500 F)

8. Exposure Controls / Personal Protection

Exposure Limits

Ingredients:

	Acceptable Exposure Limits*		
Polytetrafluoroethylene	10 mg/m ³ 8 hr TWA (Total Dust)		
	5 mg/m ³ 8 hr. TWA (Respirable Dust)		
	*AEL is the manufacturers Acceptable Exposure Limit, where governmentally imposed occupational exposure limits are lower than the AEL are in effect, such limits shall take precedence.		
	ACGIH (TLV)	OSHA (PEL)	OTHER
Modified Organic Oil	5 mg/m ³ 8 hours TWA (Inhalable Fraction)	5 mg/m ³ 8 hours TWA	
Titanium Dioxide	10mg/m ³ TWA	15mg/m ³	
Inert Filler	2 mg/m ³ (resp. fraction)	5 mg/m ³ (resp. fraction)	
Natural Graphite	2.0 mg/m ³ TWA Respirable Dust	N/E	3 mg/m ³ for nuisance dust

Personal Protective Equipment (PPE)

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

Skin: Chemical resistant gloves.

Respiratory Protection: If necessary, NIOSH approved for organic vapors and dust. If Temp. exceed 250° C use respirator if ventilation is inadequate to maintain HF and Carbonyl Fluoride levels below permissible exposure limit, use a positive pressure air supplied respirator. Air purifying respirators may not provide adequate protection. Do not exceed 260 C. (500 F)

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 or smoking.

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

9. Chemical and Physical Properties

Appearance: Grayish-Green Fibrous Compound
 Odor: Mild Odor
 pH: 5.5 to 6.0
 Solubility in Water: NIL
 Specific Gravity: 1.69 (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: None (under 260 C)
 Flash Point: Greater than 340 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, Hydrogen Fluoride, Carbonyl Fluoride, acid fluorides.
 Incompatibility: Strong Oxidizers like Fluorine and related compounds. Can react with finely divided aluminum and metal powders.

11. Toxicology Information

Primary Routes of Entry: Inhalation and contact.
Signs and Symptoms of Overexposure: **Inhalation:** Dust can cause respiratory irritation.
Eyes: Redness and discomfort
Skin: Dryness, irritation, redness and itching.

Existing Conditions Aggravated
by Exposure: None Known

Carcinogenicity
NTP: None present at 0.1% or greater
IARC: Titanium Dioxide, Group 2B IARC
OSHA Regulated: NO

Toxicity : (Not a toxicity hazard in purchased state and under recommended temperature limits)

Skin :	(Liquid Binder only)	Toxicity :	LD50>2000 mg/kg Rabbit
Ingestion:	(Liquid Binder only)	Toxicity :	LD50>5000 mg/kg Rat
	(PTFE Only)	Toxicity :	LD50 >11,280 mg/kg, Rat

Acute Health Hazards: Skin: Defatting of the skin, Dryness and Irritation
Inhalation: None expected when used within prescribed recommended temperature range.
The thermal decomposition vapors of fluorinated polymers (PTFE above 330 C) may cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco. Do not exceed 260 C. (500 F)

Chronic Health Hazards: Titanium Dioxide, possible carcinogen (inhalation) 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

PTFE is essentially inert to the environment. PTFE does not decompose in landfills and therefore does not release toxic degradation materials into the ecosystems. PTFE is not toxic to aquatic life. Liquid Binder Only: Aquatic toxicity rating : TLM (96 hr) >100 ppm.

13. Disposal Considerations

RCRA 40 CFR 261 Classification : This product as purchased does not fall under current US EPA RCRA definitions of Hazardous Waste.

It is recommended that if this product in its purchased form is going to become a waste, that it be disposed of by a licensed waste disposal company, observing all Federal, State and Local regulations. Due to the inherent thermal resistance of PTFE and its components it is usually not incinerated. Recycle or landfills are preferred options. Incinerate only if incinerator is capable of scrubbing out Hydrogen Fluoride and other acid combustion products. Additionally, 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): 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: Tetrafluoroethylene, 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: Titanium Dioxide.
WHMIS Classification : Titanium Dioxide D2A

EUROPEAN UNION : Polytetrafluoroethylene: CLP Eye Irrit. 2, Titanium Dioxide: CLP Acute Tox 4, Carc. 2,
Natural Graphite: 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
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) 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 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.
Do not exceed 260 C. (500 F)

PREPARATION INFORMATION

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