Conforms to Regulation (EC) No. 1907/2006 - United Kingdom (UK)

SAFETY DATA SHEET

API MODIFIED & API SILICONE

Product classified as hazardous according to NOHSC classification

1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

Product Name: API MODIFIED & API SILICONE

Use of the substance/preparation: Lubricant grease (petroleum based). Tubing, casing and line pipe.

Company/undertaking identification

Manufacturer:
Jet-Lube, Inc.
4849 Homestead Rd., Suite 232
Houston, TX 77028
Email: doldiges@jetlube.com USA Coprorate phone: (713) 670-5700

Australian Contact:
Xtex Pty. Ltd
ABN 40 121 722 236
80 Daly Street
Ascot, WA 6104 1300-00-9839 phone 0437-272-490 mobile

Emergency telephone numbers:
NHS DIRECT in the UK USA: CHEMTREC: (800) 424-9300
Emergency number: 08454647 Outside US (Chemtrec): (703) 527-3887
Xtex Pty. Ltd 1300-00-XTEX

2. Hazards identification

The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification:
Repr. Cat. 1; R61
Repr. Cat. 3; R62
Xn: R20/22
R33
N; R50/53

Physical/chemical hazards: Not applicable

Human health hazards
Harmful by inhalation and if swallowed.
Danger of cumulative effects.
May cause harm to the unborn child.
Possible risk of impaired fertility.

Environmental hazards: Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

See section 11 for more detailed information on health effects and symptoms.

3. Composition /information on ingredients

Substance/preparation: Preparation

Ingredient name	CAS Number	EC Number	%	Classification
Lubricating grease (petroleum base)	74869-21-9	278-011-7	50 - 70	Not classified
lead	7439-92-1	231-100-4	25 - 35	Repr. Cat. 1; R61 Repr. Cat. 3; R62 Xn; R20/22 R33 N; R50/53
zinc	7440-66-6	231-175-3	10 - 15	N; R50/53
graphite, natural	7782-42-5	231-95-3	1 - 10	Not classified
copper	7440-50-8	231-159-6	2 - 5	N; R50
Calcium Oxide	1305-78-8	215-138-9	1	Not classified

3a. Lubricating Grease Composition /information on ingredients

Substance/preparation: Preparation

Ingredient name	CAS Number	EC Number	%	Classification
Naphthenic Distillates	64742-52-5	255-155-0	79-90	Not classified
Hydrotreated residual Oils	64742-57-0	265-101-6	5 -10	Not classified
Calcium 12-hydroxystearate	3159-62-4	221-605-8	5-10	Not classified
polyisobutylene	9003-29-6	Polymer	0-1	Not classified
The Petroleum Oils and additives do not require carcinogic listing.				
See section 16 for the full test of the R Phrases declared above.				

*** Occupational Exposure Limit(s), if available, are listed in Section 8**

The quantities of potential carcinogenic compounds detected in the oil are below the regulatory levels beyond which listing as carcinogenic material is required.

4. First aid measures

Effects and symptoms

Inhalation: Harmful by inhalation.

Ingestion: Harmful if swallowed.

Skin Contact: No known significant effects or critical hazards.

Eye contact: No known significant effects or critical hazards.

First aid measures

Inhalation: Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion: Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Obtain medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen thigh clothing such as a collar, tie, belt or waistband.

Skin contact: Flush contaminated skin with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Extinguishing media: Use an extinguishing agent suitable for the surrounding fire.

Special exposures hazards: No specific hazard.
This material is very toxic to aquatic organisms. Fire water contamined with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products: These products are carbon oxides (CO, CO_2). Some metallic oxides.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental release measures

Personal precautions: Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.

Environmental precautions: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up: If emergency personnel are unavailable, contain spilt material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dyke spilt material or otherwise contain material to ensure runoff does not reach a waterway. Place spilt material in an appropriate container for disposal.

7. Handling and storage

Handling: Do not ingest. Keep container closed. Use only with adequate ventilation. Avoid breathing vapor or mist. Avoid contact of spilt material and runoff with soil and surface waterways. Wash thoroughly after handling.

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

Packaging materials

Recommended: Use original container.

Specific uses: Not available.

8. Exposure controls/personal protection

Ingredient Name:	Occupational exposure limits
lead	**EH40-WEL (United Kingdom (UK), 9/2006).**
	TWA: 0, 15 mg/m^3 65534 times per shift, 8 hour/hours.
graphite, natural	**EH40-WEL (United Kingdom (UK), 1/2005)**
	TWA: 10 mg/m^3 8 hour/hours. Form: Inhalable fraction
	STEL: 4 mg/m^3 15 minute/minutes. Form: Respirable fraction
copper	**EH40-WEL (United Kingdom (UK), 9/2006). Notes: As Cu**
	TWA: 1 mg/m^3 65534 times per shift, 8 hour/hours.
	STEL: 2 mg/m^3 65534 times per shift, 15 minute/minutes
Calcium Oxide	**TLV (US):** 2 mg/m^3
	STEL: 6 mg/m^{3,} 4 times, 15 minute intervals.

Exposure controls

Occupational exposure controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

9. Physical and chemical properties

Physical state: Liquid (gel)
Color: Black / brown
Odor: Petroleum pungent
pH: Neutral
Boiling point: >274ºC (525.2ºF)
Melting point: >138ºC (280.4ºF)
Flash point: Open cup: 221ºC (429.8ºF)
Flammability (solid, gas): Not applicable
Explosive properties: Not available
Explosive limits: Lower: 0.9% Upper: 7%
Oxidizing properties: Not available
Vapor pressure: <0.01 kPa (<0.08 mm Hg) (at 20ºC)
Specific gravity: Not available
Density: 2 g/cm^3
Solubility: Insoluble in cold water, hot water
Octanol/water partition coefficient: Not available
Viscosity: Not available
Vapor density: >5 (Air = 1)
Evaporation rate (butyl acetate = 1): <0.01 compared with Butyl acetate
Auto-ignition temperature: >260ºC (500ºF)

10. Stability and reactivity

Stability: The product is stable
Conditions to avoid: Keep away from sources of ignition. Keep away from heat.
Materials to avoid: Although encapsulated by grease, zinc reacts with water and releases a flammable gas.
Hazardous Decomposition products: Metallic oxides.

Hazardous polymerization: Will not occur.

11. Toxicological information

Potential acute health effects

Inhalation: Harmful by inhalation.
Ingestion: Harmful if swallowed.
Skin contact: No known significant effects or critical hazards.
Eye contact: No known significant effects or critical hazards.

Acute toxicity

Ingredient name	Test	Result	Route	Species
lead	LDLo	155 mg/kg	Oral	Human
	LDLo	160 mg/kg	Oral	pigeon
zinc	LDLo	388 mg/kg	Oral	duck
calcium oxide	LD50	500-2000 mg/kg	Oral	Rat

Potential chronic health effects

Ingredient name	Carcinogenic effects	Mutagenic effects	Developmental toxicity	Impairs fertility
lead	-	-	Repr. Cat. 1; R61	Repr. Cat. 3; R62

Carcinogenicity: No known significant effects or critical hazards.

California Prop 65: This product contains Lead, known to the state of California to cause birth defects or other reproductive harm.

Australian National Health & Safety Commission (NOSC): None
Mutagenicity: No known significant effects or critical hazards.
Reproductive toxicity: Contains material that can cause birth defects.

Over-exposure signs/symptoms

Inhalation: No known significant effects or critical hazards as high viscosity makes inhalation unlikely.
Ingestion: No known significant effects or critical hazards as grease results in gastric distress negating bioaccumulation concerns.
Skin: No known significant effects or critical hazards.
Target organs: Contains material that causes damage to the following organs: blood, kidneys, liver, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), eye (lens or cornea).

Other adverse effects: Not available

12. Ecological information

Ecotoxicity data

Ingredient name	Species	Period	Result
lead	Oncorhynchus mykiss (LC50)	96 hr/hrs	1.17 mg/l
	Oncorhynchus mykiss (LC50)	96 hr/hrs	471 mg/l
	Oncorhynchus mykiss (LC50)	96 hr/hrs	542 mg/l

zinc	Daphnia magna (EC50)	48 hr/hrs	2.8 mg/l
	Pimephales promelas (LC50)	96 hr/hrs	0.238 mg/l
	Oncorhynchus mykiss (LC50)	96 hr/hrs	0.24 mg/l
	Oncorhynchus mykiss (LC50)	96 hr/hrs	0.41 mg/l
	Oncorhynchus mykiss (LC50)	96 hr/hrs	0.56 mg/l
	Daphnia magna (EC50)	96 hr/hrs	0.57 mg/l
copper	Daphnia magna (EC50)	48 hr/hrs	0.0318 mg/l
	Daphnia magna (EC50)	48 hr/hrs	0.036 mg/l
	Daphnia magna (EC50)	48 hr/hrs	0.055 mg/l
	Pimephales promelas (LC50)	96 hr/hrs	0.0094 mg/l
	Pimephales promelas (LC50)	96 hr/hrs	0.0103 mg/l
	Pimephales promelas (LC50)	96 hr/hrs	0.0278 mg/l
Graphite	Fish (LC50)	96 hr/hrs	>1800 mg/l
	Algae (EC50)	72 hr/hrs	>1000 mg/l
Calcium Oxide	Cyprinus carpio	96 hr/hrs	1070 mg/l
Lubricating grease, petroleum based	Fish (LC50)	96 hr/hrs	>1800 mg/l
	Algae (EC50) ,biomass	72 hr/hrs	641 mg/l
	Algae (EC50) ,growth rate	72 hr/hrs	>1000 mg/l

Other ecological information

Persistance/degradability:

Ingredient name	BOD	COD	ThOD
Lubricating grease, petroleum based	Not available	Not available	3.78 mg O_2/mg

Ingredient name	Aquatic half-life	Photolysis	Biodegradability
Lubricating grease, petroleum based	Not available	Not available	6.2 % degradation in 28 days (BODIS)

Other ecological information

Mobility: Not available

Other adverse effects: Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

13. Disposal consideration

Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Waste classification: A1020

Hazardous waste: The classification of the product may meet the criteria for a hazardous waste.

14. Transport information

Hazchem code 1Z

International transport regulations

Canadian Transportation of Dangerous Goods: This product is not considered Hazardous Material for shipping.

Regulatory information	UN Number	Proper shipping name	Class	Packing group	Label	Additional information
USA Dept of Transportation	UN3077	Environmentally hazardous substance, Solid, n.o.s. (lead & copper)	9	III		**Extreme Marine pollutant** Marine pollutant (P)
ADR/RID Class	UN3077	Environmentally hazardous substance, liquid, n.o.s. (lead)	9	III		**Limited quantity** LQ7
ADNR Class	UN3077	Environmentally hazardous substance, liquid, n.o.s. (lead)	9	III		-
IMDG Class	UN3077	Environmentally hazardous substance, liquid, n.o.s. (lead). Marine pollutant.	9	III		**Emergency schedules (EmS)** F-A, S-F
	UN3077					**Marine pollutant** Marine pollutant (P)
IATA-DGR Class	UN3077	Environmentally hazardous substance, liquid, n.o.s. (lead)	9	III		-
Canada TDG	Land & Rail (Marine)	Not regulated (Regualted)				
Australia ADG Code	UN3077	Environmentally hazardous substance, liquid, n.o.s. (lead)	9	III		

15. Regulatory information

Poison Schedule Not scheduled

EU Regulations

Hazard symbol/symbols:

Toxic, dangerous for the environment.

Risk Phrases:
R61 - May cause harm to the unborn child
R62 - Possibe risk of impaired fertility.
R20/22 - Harmful by inhalation and if swallowed
R33 - Danger of cumulative effects.
R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:
S53 - Avoid exposure; obtain special instructions before use.
S20/21 - When using do not eat, drink or smoke.
S28 - After contact with skin, wash immediately with plenty of water.
S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.
S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.

Contains: lead 231-100-4

Product use: Classification and labeling have been performed according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and the intended use. Industrial applications.

Other EU regulations

Additional warning phrases: Not applicable.

Restrictions on the marketing and use directive: Restricted to professional users.

National regulations United Kingdom (UK)

COSHH: The use of this chemical product must be in compliance with provisions included in COSHH (1999) and COSHH Essentials (1999).

US Regulations:

TSCA: All components are listed. (See Section 3). **TSCA 12B Components:** None

SARA 313 (40 CFR Part 372): This material contains Materials which are subject to the reporting requirements.

SARA 311/312: None

CERCLA RQ: RQ: Lead: 10 lbs; Zinc: 1000 lbs; Copper: 5000 lbs.

OZONE DEPLETING CHEMICALS: None

TSCA REGULATORY: This material or its components are listed in the TSCA inventory.

RCRA Hazard class: N/A

Clean Air Act Sect 112 Hazardous Air Pollutants (HAPs): Lead **Volatile Organic Chemicals (VOCs):** Nil

State Right to Know:

New Jersey:	64742-52-5, 7440-50-8, 7440-66-6, 7782-42-5, 7439-92-1
Pennsylvania:	64742-52-5, 7440-50-8, 7440-66-6, 7782-42-5, 7439-92-1
Massachusetts:	64742-52-5, 7440-50-8, 7440-66-6, 7782-42-5, 7439-92-1
Rhode Island :	64742-52-5, 7440-50-8, 7440-66-6, 7782-42-5, 7439-92-1

Canadian Regulations:

DSL: All components are listed. (See Section 3)

WHMIS: CLASS D-2b: **It is classed, as D2b because of the lead content. The product is not regulated under TDG for land transport, but is regulated for sea transport, because of the lead content.**

RoHs Compliance

API MODIFIED a thread compound for oilwell & mining drilling applications contains 30% lead as an additive to prevent thread galling in extreme contact pressures. It contains none of the other listed substances above the listed level. It would not comply with the regulations if they were applicable. This product has nothing to do with lead or leadless soldering applications.

16. Other information

Full text of R phrases referred to in sections 2 and 3 - United Kingdom (UK):
R61 - May cause harm to the unborn child
R62 - Possible risk of impaired fertility.
R20/22 - Harmful by inhalation and if swallowed.
R33 - Danger of cumulative effects.
R50 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK):
Repr. Cat. 1 - Toxic to reproduction Category 1
Repr. Cat. 3 - Toxic to reproduction Category 3
Xn - Harmful
N - Dangerous for the environment.

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Notice to reader:

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