

# JET-LUBE Z-PLATE - Aerosol

## 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: JET-LUBE Z-PLATE - Aerosol
Use of the substance/preparation: Thread Anti-seize lubricant & coating

Company/undertaking identification

Manufacturer: Jet-Lube, Inc.

4849 Homestead Rd., Suite 232 Houston, TX 77028

Email: doldiges@jetlube.com

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: Australian Poison Information Centre 13-11-26

## 2. Hazards identification

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

Classification: Extremely Flammable Liquid

Physical/chemical hazards: Flammable Liquid/Aerosol/Gas: Category 1

Human health hazards Acute Toxicity: Category 4; Skin Corrosion: Category 3; Skin Sensitization: UN; Eye: Category 2B

Environmental hazards: Acute Toxicity: Category III; Chronic Toxicity: Category IV

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

Substance/preparation:	Preparation			
ngredient name	CAS Number	EC Number	%	Classification
Acetone	67-64-1	200-662-2	30 - 36	F; R11 - Xi; R36-R66-R67
Methyl Ethyl Ketone	78-93-3	2-489-3	15 - 19	F; R11 - Xi; R36-R66-R67
Xylene	1330-20-7	215-535-7	7.5 - 11	R10 - Xn; R20/21-Xi; R38
zinc	7440-66-6	231-175-3	8 - 12	N; R50/53
Alkyd Resin solution	Not disclosed	UN	7 - 9	Not classified
Proprietary mixture of dispersants & driers	Not disclosed	UN	0.7 - 1.5	F+; T+; R-12, R45-46
Hydrocarbon Propellant	68476-85-7	270-704-2	20-25	F; R11 - Xi; R36-R66-R67
The solvents and additives do not require care	rinogic listing			

Risk Phrases:

R11; R36; R66; R67 - SEE Section 15 for greater details

Safety Phrases:

S2; S9 S16; S26; S62 - SEE Section 15 for greater details

#### 4. First aid measures

Effects and symptoms

Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. Irritation may lead to chemical

pneumonitis and pulmonary edema. May cause numbness in the extremities.

Seek immediate medical attention. Do not induce vomiting. May cause irritation of the digestive tract. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse,

unconsciousness, coma and possible death due to respiratory failure.

Repeated exposure may cause skin dryness, irritation or cracking.

May be irritating to the eyes.

Eye contact: First aid measures

Inhalation:

Inhalation:

Ingestion:

Skin Contact:

Move exposed person to fresh air. 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. Seek medical attention if symptoms occur. If unconscious, place in recovery position and seek medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

<sup>\*</sup> Occupational Exposure Limit(s), if available, are listed in Section 8

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Ingestion:

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. Seek medical attention if symptoms occur. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, etc.

Skin contact:

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Seek medical attention if symptoms occur. 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. Seek medical attention if irritation occurs.

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

#### 5. Fire-fighting measures

Extinguishing media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam.

Inappropriate Extinguishing Media:

Do NOT use straight streams of water. Cool containers with flooding quantities of water until well after fire is out.

Special exposures hazards: Hazardous thermal decomposition products: Special protective equipment for fire-fighters:

Smoke, Fume, Incomplete combustion products. Oxides of carbon, zinc & nitrogen.

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. May polymerize explosively when involved in a fire. Containers may explode when heated.

#### 6. Accidental release measures

Personal precautions: Environmental precautions: See Exposure Controlls in Section 8 below.

Prevent entry into waterways, Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains, sewers, basements or confined areas. Dyke far ahead of liquid spill for later recovery and disposal.

Methods for cleaning up:

Land Spill: Stop leak if you can do so without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

#### 7. Handling and storage

Handling:

Wash thoroughly after handling.

Storage:
Packaging materials

Store in a cool, well-ventilated area. Storage containers should be earthed and bonded. Drums must be earthed and bonded and equipped with self-closing valves, pressure vacuum bungs and flame arresters. Storage Temperature: [0C(-18F)-35C (95F)] Storage Pressure: [Ambient]

Use original container.

Recommended: Specific uses:

Not available.

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8. Exposure controls/personal protection

Ingredient Name: Occupational exposure limits Acetone

TLV (United States (US))

TWA: 500 STEL: 750 (ppm) from ACGIH (TLV) [United States]
TWA: 750 STEL: 1000 (ppm) from OSHA (PEL) [United States]
TWA: 500 STEL: 1000 [Austalia] Acetone Acetone

Acetone Acetone

TWA: 1185 STEL: 2375 (mg/m3) [Australia]
TWA: 750 STEL: 1500 (ppm) [United Kingdom (UK)] Acetone TWA: 1810 STEL: 3620 (mg/m3) [United Kingdom (UK)] Acetone TWA: 1800 STEL: 2400 from OSHA (PEL) [United States] Acetone

Consult local authorities for acceptable exposure limits.

Methyl Ethyl Ketone TLV (United States (US)) 590 (mg/m3) Frequency: 4 times, schedule: 15 minutes

STEL: 885 (mg/m3)

STEL (United States (US)) 300 ppm

PEL: 200 ppm

Xylene TLV (United States (US)) 434 mg/m3

PEL: 651 mg/m3, Frequency: 4 times, schedule: 15 minutes

NOT LISTED ON EH40-WEL (United Kingdom (UK), 9/2006). Zinc

> NO TWA, PEL or STEL DATA found for metallic zinc STEL: 20 mg/m3 65534 times per shift, 15 minute/minutes

TLV (United States (US)) 1000 ppm; schedule: 15 minutes Hydrocarbon Propellant

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.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a Respiratory protection:

NIOSH or European Standard EN 149 approved respirator when necessary.

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 Color: Gray Ethereal Odor: pH: Neutral

**Boiling point:** -18 - 162 °C (-4 - 324°F)

-95.35 (-139.6°F) Melting point:

Flash point: >CLOSED CUP: -20°C (-4°F). TAG CLOSED CUP: -9°C (15.8°F).

Flammability (solid, gas): Extremely Flammable

> Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Vapors can flow along surfaces to distant ignition source and flash back. Contact with strong oxidizers may cause fire. Sealed containers

**Explosive properties:** 

may rupture when heated. Sensitive to static discharge. (Approximate volume % in air): LEL: 1.9 - 5.3 %V UEL: 8.5 - 15 %V **Explosive limits:** 

Oxidizing properties: None

Vapor pressure: 24 kPa (@ 20°C)

Specific gravity: 0.85

Density: 850 kg/m3 (7.1 lbs/gal, 0.85 kg/dm3)

Solubility: Solvent fraction largely soluble in cold water, hot water.

Octanol/water partition coefficient:

Viscous like oil Viscosity: Vapor density: >1 (Air = 1)

< 0.11 compared with Butyl acetate Evaporation rate (butyl acetate = 1):

465°C (869°F) **Auto-ignition temperature:** 

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10. Stability and reactivity

Stability:

Conditions to avoid:

Materials to avoid:

The product is stable

Keep away from sources of ignition. Keep away from heat.

Strong oxidizing agents, amines, ammonia, copper, isocyanates, caustics (e.g. ammonia, ammonium hydroxide, calcium hydroxide, potassium hydroxide, sodium hydroxide), chlorosulfonic acid, fuming sulfuric acid, potassium tert-butoxide, pyridine, chloroform + alkali, hydrogen peroxides + nitric acid, 2-propanol, inorganic acids.

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

**Hazardous Decomposition** 

products:

Hazardous polymerization:

Has not been reported.

11. Toxicological information

Potential acute health effects

Inhalation - Toxicity:

Inhalation - Irritation:

Ingestion: Skin contact:

Eye contact:

**Acute toxicity** 

Ingredient name Acetone Acetone

Acetone Acetone Acetone Acetone

Acetone Methyl Ethyl Ketone

Methyl Ethyl Ketone Methyl Ethyl Ketone Methyl Ethyl Ketone Methyl Ethyl Ketone Methyl Ethyl Ketone Methyl Ethyl Ketone

Xylene Xylene

Xylene zinc

Hydrocarbon Propellant

**High Pressure Injection:** 

Potential chronic health effects

Carcinogenicity:

California Prop 65:

Australian National Health & Safety Commission (NOSC):

Mutagenicity: Reproductive toxicity:

Over-exposure signs/symptoms

Inhalation:

Ingestion: Skin: Target organs:

Other adverse effects:

Minimally Toxic. Based on test data for the material.

Negligible hazard at ambient/normal handling temperatures with adequate ventillation.

No known significant effects or critical hazards. Mildly irritating to skin with prolonged exposure.

Can cause mild, short-lasting discomfort to eyes. Not expected in well ventillated areas.

Result LD -50, Draize 72 Hrs. 5800 mg/kg LD -50, Draize 72 Hrs. 3000 mg/kg 5340 mg/kg 50100 mg/m 8 hours 44000 mg/m 4 hours

6480 mg/kg

80 mg/kg

32 gm/m3/4H

4300 mg/kg

500 mg/kg - Moderate

402 mg/kg - Mild

23500 mg/m3/8H

>20,000 mg/kg BW

2737 mg/kg LD -50, Draize 72 Hrs. 3000 mg/kg

LD-50 - 14 days LD -50, Draize 24 Hrs. LD -50, Draize 24 Hrs. LD -50, Draize LC -50 LC -50

LD-50 - 14 days LD-50, 72 Hrs. LC-Lo, 4 Hrs.

LC -50

LC -50

LC -50

LD -50

LDLo

LC -50

LD-50. 72 Hrs.

No data available >2000 ma/ka

Seek medical advice immediately for subcutaneous injection.

388 mg/kg

500,000 mg/m3/15 min.

Inhalation

Oral

Acute Oral

Acute Oral

Inhalation

Inhalation

Inhalation

Acute Oral

Acute Oral

Skin test -

Skin test -

Skin test -

Eve test -

Inhalation

Inhalation

Inaestion

Acute Oral

Inhalation

Skin test -

**Species** 

Rat

Mouse

Rabbit

Mouse

Mouse

Rahhhit

Rabbit

Rabbit

Rabbit

Mouse

Rat

Rat

Rat

duck

Rat

Rabbit

Rat

Rat

Rat

May contain small amounts of Ethylbenzene which is known to cause cancer.

May contain small amounts of Ethylbenzene which is known to cause cancer.

May contain small amounts of Ethylbenzene which is known to cause cancer. No known significant effects or critical hazards. No known significant effects or critical hazards.

No known significant effects or critical hazards as high viscosity makes inhalation unlikely. No known significant effects or critical hazards as grease results in gastric distress negating bioaccumulation

No known significant effects or critical hazards. No known significant effects or critical hazards.

Not available

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## 12. Ecological information

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Ingredient name **Species Period** Result LC50 (96 HR.) Acetone Trout 5540 mg/l Bluegill LC50 (96 HR.) Acetone 8300 mg/l Pimephales promelas LC50 (96 HR.) Acetone 7500 mg/l Methyl Ethyl Ketone Trout LC50 (96 HR.) No data Methyl Ethyl Ketone Bluegill LC50 (96 HR.) 1690 mg/l 5640 to 1690 mg/l Methyl Ethyl Ketone Bluegill TLm Methyl Ethyl Ketone Pimephales promelas LC50 (96 HR.) 3220 mg/l Xvlene fish Pimephales promelas LC50 (96 hour) 26,700 ug/L **Xylene** Crustcea Daphnia magna EC50 (24 HR.) 150,000 ug/L Daphnia magna (EC50) 48 hr/hrs 2.8 mg/l zinc 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 0.56 mg/l Oncorhynchus mykiss (LC50) 96 hr/hrs

Daphnia magna (EC50)

Biodegradation:

Solvent portion biodegrades 55-63% in 28 days in OECD 301B tests.

Other ecological information

Mobility:

Material -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

0.57 ma/l

96 hr/hrs

Other adverse effects:

No known significant effects or critical hazards.

# 13. Disposal consideration

Methods of disposal:

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

Hazardous waste:

European Waste Code: 07 01 99 NOTE: These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code(s).

## 14. Transport information

#### Hazchem code 1Z

International transport regulations

international transport regulations							
Regulatory information	UN Number	Proper shipping name	Class	Packing group	Label	Additional information	
USA Dept of Transportation	1950	Consumer Comodoty ORM-D	2.1	None			
ADR/RID Class	1950	Aerosols, Flammable	2.1	None		-	
ADNR Class	1950	Aerosols, Flammable	2.1	None		-	
IMDG Class	1950	Aerosols, Flammable	2.1	None		-	
IATA-DGR Class	1950	Aerosols, Flammable	2.1	None		-	
Australia ADG Code	1950	Aerosols, Flammable	2.1	None	-	Reference SP-AU01	
15 Deculatory information							

15. Regulatory information

Poison Schedule **EU Regulations** 

Not scheduled

R12 - Extremely flammable. R36 - Irritating to eyes. R65; Harmful: may cause lung damage if swallowed. R66: Repeated exposure may cause skin dryness or cracking. R67: Vapors may cause drowsiness and dizziness.

Risk Phrases: Safety Phrases:

S-2: Keep out of reach of children S9- Keep container in a well-ventilated place. S16- Keep away from sources of ignition - No smoking. S23; Do not breathe vapour / spray S24; Avoid contact with skin. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S29/35: Do not empty into drains; dispose of this material and its container in a safe way. S51: Use in well ventillated areas. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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.

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Other EU regulations
Restrictions on the marketing
and use directive:

Not applicable.

National regulations United Kingdom (UK)

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: FIRE: YES, PRESSURE GENERATING: YES, REACTIVITY: NO, ACUTE: YES, CHRONIC: NO

CERCLA RQ: >5000 pounds

OZONE DEPLETING CHEMICALS: None
Clean Air Act Sect 112 Hazardous Air Pollutants (HAPs): Contains, in part, MEK and Xylene

Volatile Organic Chemicals (VOCs): 336 grams per liter

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

RCRA Hazard class: Mix of U159, U239, U002, Flammable/Ignitable.

 State Right to Know:
 New Jersey:
 67-64-1, 78-93-3, 1330-20-7, 7440-66-6, 68476-85-7

 Pennsylvania:
 67-64-1, 78-93-3, 1330-20-7, 7440-66-6, 68476-85-7

 Massachusetts:
 67-64-1, 78-93-3, 1330-20-7, 7440-66-6, 68476-85-7

Rhode Island : 67-64-1, 78-93-3, 1330-20-7, 7440-66-6, 68476-85-7

<u>Canadian Regulations:</u> <u>DSL:</u> All components are listed. (See Section 3)

WHMIS: CLASS A-B5.

## 16. Other information

**History** 

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Version: 1

Prepared by:

Name & Title Donald Oldiges, VP of Research & Development

## Notice to reader:

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