



# SAFETY DATA SHEET

## Z FOAM PENETRATE CHAIN & CABLE LUBE

Print Date: 25-Apr-2019

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Version 2

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

**Product identifier**

**Product Name** Z Foam Penetrant Chain and Cable Lube

**Other means of identification**

**Synonyms** Z Foam 497255

**Recommended use of the chemical and restrictions on use**

**Uses advised against** No information available

**Details of the supplier of the safety data sheet**

**Supplier Address**

Zircon Industries Incorporated  
4920 Commerce Parkway #9  
Cleveland, OH 44128  
216-595-0200

**E-mail address**

staff@liquidheat.com

**Emergency telephone number**

**Emergency Telephone** InfoTrac 1-800-535-5053

### 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

|                             |             |
|-----------------------------|-------------|
| Skin Corrosion / Irritation | Category 2  |
| Serious Eye Irritation      | Category 2A |
| STOT (Single exposure)      | Category 3  |
| STOT (Repeated exposure)    | Category 2  |
| Gasses under pressure       | Category 1  |
| Flammable Aerosol           | Category 1  |
| Flammable Liquid            | Category 1  |

**Label elements**

**Emergency Overview**

**DANGER**



**Hazard statements**

Causes Skin Irritation  
 Extremely Flammable Aerosol  
 May be fatal if swallowed  
 Causes eye damage/ irritation  
 Contains Gas Under Pressure; may explode if heated  
 May cause damage to organs through prolonged or repeated exposure

**Precautionary Statements - Prevention**

Flammable liquid and vapor  
 May be fatal if swallowed and enters airway.  
 Causes skin irritation.  
 Use personal protective equipment as required.  
 Pressurized container. Do not pierce or burn, even after use  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves

**Precautionary Statements - Response**

IF EXPOSED or concerned: Get medical advice/attention  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation or rash occurs: Get medical advice/attention  
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth

**Precautionary Statements - Storage**

Store in well-ventilated area  
 Do not expose to temperatures above 50C / 122F

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not Applicable

Unknown Acute Toxicity                      0% of the substance or mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

| Chemical Name  | CAS No.    | Weight-% | Trade Secret |
|--|------------|----------|--------------|
| Mineral oil, petroleum distillates, solvent dewaxed heavy paraffinic | 64742-42-5 | 40-90    | *            |
| Isobutane  | 75-28-5    | 2-5      | *            |
| Propane  | 74-98-6    | 10-20    | *            |
| Butane   | 106-97-8   | 2-10     | *            |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### First aid measures

##### General advice

Immediate medical attention is required.

##### Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately.

##### Skin Contact

Wash off immediately with soap and plenty of water.

##### Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

##### Ingestion

Rinse mouth. Get medical attention if symptoms occur.

##### Self-protection of the first aider

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

##### Most important symptoms and effects, both acute and delayed

##### Symptoms

No information available.

##### Indication of any immediate medical attention and special treatment needed

##### Note to physicians

Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Dry chemical, CO2 or water spray.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

##### Personal precautions

Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

##### Environmental precautions

##### Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.

##### Methods and material for containment and cleaning up

##### Methods for containment

Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

##### Methods for cleaning up

Cover liquid spill with sand, earth or other non-combustible absorbent material.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

|   |  |
|---|--|
| <b>Advice on safe handling<br/>Conditions for safe storage,<br/>including any incompatibilities</b> | Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.            |
| <b>Storage Conditions</b>   | Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. |
| <b>Incompatible materials</b>   | None known based on information supplied.  |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

NIOSH IDLH *Immediately Dangerous to Life or Health*

### Appropriate engineering controls

|                             |   |
|-----------------------------|---|
| <b>Engineering Controls</b> | Showers<br>Eyewash stations<br>Ventilation systems. |
|-----------------------------|---|

### Individual protection measures, such as personal protective equipment

|                                       |   |
|---------------------------------------|---|
| <b>Eye/face protection</b>            | Safety Glasses with Side Shields.   |
| <b>Skin and body protection</b>       | Wear protective gloves and protective clothing.   |
| <b>Respiratory protection</b>         | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| <b>General Hygiene Considerations</b> | When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.   |

### Exposure Limits

#### **2-Propanol**

200 ppm 492 mg/m<sup>3</sup> TLV ACGIH  
 400 ppm 984 mg/m<sup>3</sup> STEL ACGIH  
 400 ppm 980 mg/m<sup>3</sup> PEL OSHA  
 400 ppm 980 mg/m<sup>3</sup> REL NIOSH  
 500 ppm 1225 mg/m<sup>3</sup> STEL NIOSH

#### **Butane**

200 ppm 1640 mg/m<sup>3</sup> TLV NIOSH  
 400 ppm 984 mg/m<sup>3</sup> STEL ACGIH  
 400 ppm 1000 mg/m<sup>3</sup> PEL OSHA

**Propane**

200 ppm 492 mg/m3 TLV ACGIH  
 400 ppm 984 mg/m3 STEL ACGIH  
 400 ppm 980 mg/m3 PEL OSHA  
 400 ppm 1000 mg/m3 REL NIOSH  
 500 ppm 1225 mg/m3 STEL NIOSH

|  |
|--|
| <b>9. PHYSICAL AND CHEMICAL PROPERTIES</b> |
|--|

Information on basic physical and chemical properties

|                       |                |                       |                          |
|-----------------------|----------------|-----------------------|--------------------------|
| <b>Physical state</b> | liquid aerosol | <b>Odor threshold</b> | No information available |
| <b>Appearance</b>     | clear          | <b>Odor</b>           | No information available |
| <b>Color</b>          | colorless      |                       |                          |

| <u>Property</u>                      | <u>Values</u>     | <u>Remarks • Method</u>  |
|--------------------------------------|-------------------|--------------------------|
| <b>pH</b>                            |                   | No information available |
| <b>Melting point/freezing point</b>  |                   | No information available |
| <b>Boiling point / boiling range</b> |                   | No information available |
| <b>Flash point</b>                   | <b>Below 73F</b>  |                          |
| <b>Evaporation rate</b>              |                   | No information available |
| <b>Flammability (solid, gas)</b>     |                   | No information available |
| <b>Flammability Limit in Air</b>     |                   |                          |
| <b>Upper flammability limit:</b>     |                   | No information available |
| <b>Lower flammability limit:</b>     |                   | No information available |
| <b>Vapor pressure</b>                | <b>101.3mm/hg</b> |                          |
| <b>Vapor density</b>                 |                   |                          |
| <b>Water solubility</b>              | Insoluble         |                          |
| <b>Solubility in other solvents</b>  |                   | No information available |
| <b>Partition coefficient</b>         |                   | No information available |
| <b>Autoignition temperature</b>      |                   | No information available |
| <b>Decomposition temperature</b>     |                   | No information available |
| <b>Kinematic viscosity</b>           |                   | No information available |
| <b>Dynamic viscosity</b>             |                   | No information available |
| <b>Explosive properties</b>          |                   | No information available |
| <b>Oxidizing properties</b>          |                   | No information available |

**Other Information**

**Explosion severity**

|   |                          |
|---|--------------------------|
| Danger of Explosion, cloud                        | No information available |
| Minimum Ignition Energy, Cloud, mJ                |                          |
| KST, (cloud), bar.m.s-1                           | No information available |
| Pmax maximum explosion pressure, Cloud, bar       | No information available |
| VMP, (cloud), bar.s-1                             | No information available |
| LOC Limiting Oxygen Concentration, Cloud, %v/v O2 | No information available |
| Softening point                                   | No information available |
| Molecular weight                                  | No information available |
| Density   | No information available |
| Bulk density                                      | No information available |
| Specific Gravity                                  | 0.68@ 25C                |

## 10. STABILITY AND REACTIVITY

### Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

### Chemical Stability

Material is stable under normal conditions.

### Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

### Conditions to avoid

Contact with incompatible materials. High temperatures

### Incompatible materials

Strong oxidizing agents.

### Hazardous decomposition products

Carbon Dioxide, Carbon Monoxide

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

|                            |  |
|----------------------------|--|
| <b>Product Information</b> | Causes serious eye damage. Can be fatal if swallowed |
| <b>Inhalation</b>          | Is a respiratory sensitizer.                         |
| <b>Eye contact</b>         | Causes eye damage/irritation.                        |
| <b>Skin Contact</b>        | Causes skin damage/irritation                        |
| <b>Ingestion</b>           | Can be fatal if swallowed.                           |

### Information on toxicological effects

|                       |                              |               |                    |
|-----------------------|------------------------------|---------------|--------------------|
| <b>Propane</b>        | <b>LD50 Dermal</b>           | <b>Rabbit</b> | <b>12800mg/kg</b>  |
|                       | <b>LD50 Oral</b>             | <b>Rat</b>    | <b>5000 mg/kg</b>  |
| <b>Butane/Heptane</b> | <b>LC50 Vapor Inhalation</b> | <b>Rat</b>    | <b>658000mg/kg</b> |
|                       | <b>LC50 Gas Inhalation</b>   | <b>Rat</b>    | <b>48000mg/kg</b>  |

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Sensitization

#### Germ cell mutagenicity

#### Carcinogenicity

No information or data specific to the product on this toxicological (health) effect is available.

#### Reproductive toxicity

#### STOT - single exposure

No information or data specific to the product on this toxicological (health) effect is available.

#### STOT - repeated exposure

No information or data specific to the product on this toxicological (health) effect is available.

|                             |  |
|-----------------------------|--|
| <b>Target Organ Effects</b> | Central nervous system, Eyes.  |
| <b>Aspiration hazard</b>    | No information or data specific to the product on this toxicological (health) effect is available. |

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

|                                   |
|-----------------------------------|
| <b>12. ECOLOGICAL INFORMATION</b> |
|-----------------------------------|

**Ecotoxicity – LC 50 Values**

|                   |                                  |                    |                 |
|-------------------|----------------------------------|--------------------|-----------------|
| <b>2-Propanol</b> | <b>Fish Rasbora Heteromorpha</b> | <b>4200mg/l</b>    | <b>96 Hours</b> |
| <b>Butane</b>     | <b>Fish Pimephales Promelas</b>  | <b>173000 ug/l</b> | <b>96 Hours</b> |

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

|                                    |
|------------------------------------|
| <b>13. DISPOSAL CONSIDERATIONS</b> |
|------------------------------------|

**Waste treatment methods**

|                               |   |
|-------------------------------|---|
| <b>Disposal of wastes</b>     | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| <b>Contaminated packaging</b> | Do not reuse container.   |

|                                  |
|----------------------------------|
| <b>14. TRANSPORT INFORMATION</b> |
|----------------------------------|

DOT Proper Shipping Name: Flammable Aerosols

IMDG Flammable Aerosols. – **NOT A MARINE POLLUTANT**

IATA: Flammable Aerosols

DOT, IMDG, IATA Primary Hazard Class: 2.1

DOT, IMDG, IATA Packing Group: II

Label Required 3

UN Number . **UN 1950**

|                                   |
|-----------------------------------|
| <b>15. REGULATORY INFORMATION</b> |
|-----------------------------------|

**International Inventories**

|               |                                      |
|---------------|--------------------------------------|
| <b>AICS</b>   | Yes                                  |
| <b>DSL</b>    | Yes                                  |
| <b>NDSL</b>   | No                                   |
| <b>IECSC</b>  | Yes                                  |
| <b>EINECS</b> | Yes                                  |
| <b>ELINCS</b> | No                                   |
| <b>ENCS</b>   | Yes                                  |
| <b>KECL</b>   | Yes                                  |
| <b>PICCS</b>  | Yes                                  |
| <b>TSCA</b>   | Yes (Registered Lautenberg 21st act) |
| <b>NZIoC</b>  | Yes                                  |

**Legend:**



**AICS** - Australian Inventory of Chemical Substances  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**IECSC** - China Inventory of Existing Chemical Substances  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**NZIoC** - New Zealand Inventory of Chemicals

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name | SARA 313 - Threshold Values % |
|---------------|-------------------------------|
|---------------|-------------------------------|

**SARA 311/312 Hazard Categories**

|                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic Health Hazard             | Yes |
| Fire hazard                       | Yes |
| Sudden release of pressure hazard | Yes |
| Reactive Hazard                   | No  |

**CERCLA**

This material, as supplied, contains no substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**SARA 311/312 Hazardous**

Yes

**Classified hazard categories**

Eye Damage or Irritation, skin damage or irritation  
 Aspiration hazard, Flammable.  
 None

**California Prop 65**

**16. OTHER INFORMATION**

|                    |                   |                |                    |                                    |
|--------------------|-------------------|----------------|--------------------|------------------------------------|
| <b><u>NFPA</u></b> | Health hazards 2  | Flammability 3 | Instability 0      | Physical and Chemical Properties - |
| <b><u>HMIS</u></b> | Health hazards 2* | Flammability 3 | Physical hazards 0 | Personal protection X              |

Revision Date 25-Apr-2019

**Revision Note**

[SDS sections updated \(\\*\\*\\*\) GHS Revision](#)

**Disclaimer**

The information provided above is intended as a guide to assist in the safe handling, use, processing, storage, transportation, disposal and release of the material listed. Nothing contained herein is to be considered as an express or implied warranty of performance or quality. The information relates only to the specific material designated and may not be applicable when such material is used in combination with any other materials or as part of any process, except as otherwise expressly described herein. The information is believed to be true and correct as of the date issued. Always make sure you are using the most current information available. The material described herein is produced for commercial and industrial use only and unless otherwise specifically designated by the manufacturer in writing has not received any specific regulatory approval such as approvals for food contact or for use in medical/surgical applications or devices. It is buyer and user's sole and exclusive responsibility to ensure that any handling, use, processing, storage, transportation, disposal and release of the material complies with all applicable laws, rules and regulations.

**End of Safety Data Sheet**