

# SAFETY DATA SHEET





Revision Date: 05/01/2015  
Revision Number: 001.0

## 1. PRODUCT AND COMPANY INFORMATION

<b>Product Name:</b>	ZINK PLATE 770 Anti-Seize / Lubricant	<b>Item number(s):</b>	20-01, 20-02
<b>Product Type:</b>	None Identified	<b>Region(s):</b>	U.S.A
<b>Restriction of Use:</b>	Armite Laboratories Inc. 1560 Superior Ave Ste. A-4 Costa Mesa, CA 92627	<b>Telephone:</b>	949 646-9035
<b>Company Address:</b>		<b>Product Emergency:</b>	<b>CHEM-TEL 800-225-3924</b>

## 2. HAZARD IDENTIFICATION

Signal Word	Hazard Class	Hazard Category	Pictogram(s)
<b>WARNING:</b>	<b>SPECIFIC TARGET ORGAN TOXICITY (Repeated Exposure)</b>	2	 
	SKIN IRRITANT	2	
	EYE IRRITANT	2B	

### Hazard Statements

May cause damage to lungs through prolonged or repeated exposure if inhaled.  
Causes Skin & Eye irritation  
Toxic to aquatic life

### Precautionary Statements

**Prevention:** Do not breathe dust, fume or mist. Do not eat or smoke when using this product. Wash hands thoroughly after handling. Wear protective eyewear. Wear protective gloves.

**Response:** Get medical advice/attention if you feel unwell. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to remove, and continue to rinse. **IF ON SKIN:** Wash with plenty of soap & water. Seek medical attention if irritation persists.

**Storage:** Store in a cool well ventilated place.

**Disposal:** Follow Federal, State & Local rules & regulations.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200 and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of chemicals (GHS).

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Zinc	7440-66-6	45 - 55
Zinc Oxide	1314-13-2	< 2
Petroleum Hydrocarbons Mixture	64742-58-1 (53%) 64742-01-4 (47%)	45 - 55
Highly Refined Mineral Oil & Additives (containing <3% (w/w) DSMO-extract, according to IP346	Mixture	2.0 -3.0
Microcrystalline Wax	64742-42-3	2.0 - 3.0

# SAFETY DATA SHEET

Revision Date: 05/01/2015  
Revision Number: 001.0



## 4. FIRST AID MEASURES

- Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.
- Skin contact:** Wash with soap and water. If hot material contacts the skin, immediately cool before attempting removal. If symptoms develop and persist, seek medical attention.
- Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If irritation persists, seek medical attention.
- Ingestion:** Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
- Symptoms:** See section 11.

## 5. FIRE FIGHTING MEASURES

- Special protective equipment for fire-fighters:** Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with full face-piece operated in positive pressure mode.
- Extinguishing media:** Water spray (fog), foam, dry chemical or carbon dioxide.
- Special firefighting procedures:** Water spray may be ineffective. Oil will float on water and can spread fire.
- Unusual fire or explosion hazard:** Closed container may explode when exposed to extreme heat.
- Hazardous combustion products:** Oxides of carbon. Acrid smoke and fumes.

## 6. ACCIDENTAL RELEASE MEASURES

- Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.**
- Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not allow product to enter sewer or waterways.
- Clean-up method:** Contaminated surfaces will be extremely slippery. Scrape up as much material as possible. Clean residue with soap & water.

## 7. HANDLING AND STORAGE

- Handling:** Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Keep container closed.
- Storage:** Keep in a cool, well ventilated area.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	NIOSH REL
Petroleum Hydrocarbons	TVL 5mg/m3 (oil Mist) 8 hr day	None established	None established
Zinc (metallic)	10mg/m3 STEL 8 hrs. Inhalable; Particulates (insoluble) Not Otherwise Specified (PNOS)  3mg/m3 TWA 8 hr(s). Form: Respirable particulates (insoluble) Not Otherwise specified.		None established

# SAFETY DATA SHEET



Revision Date: 05/01/2015  
Revision Number: 001.0

Hazardous Component(s)	ACGIH TLV	OSHA PEL	NIOSH REL
Zinc Oxide	2mg/m <sup>3</sup> TWA (Respirable) 10mg/m <sup>3</sup> STEL Respirable fraction	15mg/m <sup>3</sup> (Total) (Dust) 5mg/m <sup>3</sup> (Fume)	REL 5mg/m <sup>3</sup> CEIL 15mg/m <sup>3</sup> (10hr ceiling) STEL 10mg/m <sup>3</sup> (15 minute sample)
Industrial Grease (Oil mist mineral)	5mg/m <sup>3</sup> TWA Inhale fraction.	PEL 5-mg/m <sup>3</sup> PEL Mist TWA 5mg/m <sup>3</sup> (mist)	

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Paste	<b>Flash point:</b>	Not Available
<b>Color :</b>	Grey	<b>VOC content:</b>	Essentially 0
<b>Odor:</b>	Mild petroleum	<b>Boiling point / range:</b>	>190.5°C (>375°F)
<b>Odor threshold:</b>	Not available	<b>Melting point /range:</b>	>57°C (135°F)
<b>pH:</b>	Not available	<b>Evaporation rate:</b>	Not available
<b>Vapor Pressure:</b>	Not available	<b>Solubility in water:</b>	Insoluble
<b>Specific gravity:</b>	Not available	<b>Partition coefficient:</b>	Not determined
<b>Vapor density:</b>	N/A	<b>Flammable/Explosive limits</b>	
<b>Viscosity:</b>	Not available	Lower limits:	Not available
<b>Autoignition temp:</b>	Not determined	Upper limits:	Not available

## 10. STABILITY AD REACTIVITY

<b>Stability:</b>	Stable at normal conditions.	<b>Incompatible materials:</b> Oxidizing agents. Strong organic & inorganic acids. <b>Hazardous decomposition products:</b> Burning generates smoke, leaving residue of soot & metal oxides.
<b>Reactivity:</b>	Not available.	
<b>Hazardous reactions:</b>	Will not occur.	
<b>Conditions to avoid:</b>	None known	

## 11. TOXICOLOGICAL INFORMATION

**Relevant routes of exposure:** Skin, Eyes, Inhalation, ingestion

### Potential Health Effects/Symptoms

**Inhalation:** May cause respiratory tract irritation. Inhalation of high levels of zinc compounds may cause tightness of chest, metallic taste, cough, dizziness, fever, chills, headache, nausea, and dry throat.

**Skin contact:** Causes skin irritation.

**Eye contact:** Causes serious eye irritation.

**Ingestion:** Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Do not induce vomiting.

# SAFETY DATA SHEET



Revision Date: 05/01/2015  
Revision Number: 001.0

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Effects
Zinc	Oral LD (Rat= 630mg/kg	Blood, Central nervous system. Eyes, Immune system, Irritant, Kidney, Metabolic, Pancreas, Respiratory
Zinc Oxide	Oral LD (Rat) = >5g/kg	Blood, Gastrointestinal, Immune system, Irritant, kidney, Metabolic, Nervous system, pancreas, Respiratory, Skin

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Zinc	No	No	No
Zinc Oxide	No	No	No

## 12. ECOLOGICAL INFORMATION

**Ecological Information:** Zinc in the mineral dust form is insoluble but its processing or extended exposure in the aquatic or terrestrial environments may lead to the release of zinc in bio-available forms. Zinc is mobile and can be toxic in the aquatic environment with water hardness, pH and dissolved organic carbon content being regulating factors. It bio-accumulates in both plant & animal in terrestrial and aquatic systems. Zinc is moderately mobile in soils and is dependent on soil conditions, such as cation exchange capacity, pH, redox potential & chemical species present in the soil. Zinc also bio-accumulates in terrestrial plant, vertebrates and mammals with plant uptake dependent on soil composition.

### Aquatic ecotoxicity

Ingredient / Test	Result	Species	Exposure
<b>Zinc</b>	- Acute EC50 106 µg/l Fresh Water	Algae-Green Pseudokirchneriella Subcapitia-Exponential growth phase	72 hours
	Acute EC50 356 µg/l Fresh Water	Daphnia- Water Flea Daphnia magna	48 hrs
	Acute LC 50 238-269 µg/l Fresh Water	Fish- Flathead Minnow Pimehales promelas–newly or recently hatched	96 hrs
	Chronic NOEC 72.7µg/l Fresh Water	Daphnia- Water Flea - Daphnia magna	21 days
<b>Zinc Oxide</b> (growth rate)	Acute EC50.0 17mg/l	Algae –Salenastrum Capricornutum	72 hrs
	- US EPA Acute LC50 320ppm Fresh Water		

## 13. DISPOSAL CONSIDERATIONS

**Recommended method of disposal:** Follow all local, state, federal and provincial regulations for disposal.

## 14. TRANSPORTATION INFORMATION

# SAFETY DATA SHEET



Revision Date: 05/01/2015  
Revision Number: 001.0

The classification of this product is due solely to the presence of one or more US Dot listed "Hazardous substances that are subject to reportable quantity requirements and only applies to shipments of packages greater than, or equal to, the product reportable quantity. Package sizes less than the reportable quantity are not regulated as hazardous materials

**US Dept of Transportation (49 CFR) – Not regulated**

**ICSO/IATA - Not Regulated** The marine pollutant mark is not required when transported in sizes of  $\leq 5$ kg.  
Quantity limitation: 400 kg passenger & cargo aircraft

**IMO/IMDG - Not Regulated** The marine pollutant mark is not required when transported in sizes of  $\leq 5$ kg.

**Additional Shipping Information for container sizes greater than RQ.**

Proper shipping name: RQ. Environmentally hazardous substances, solid, n.o.s. (Zinc (powder))

Hazard class or division: 9

Identification number: UN 3077

Packing group: III

## 15. REGULATORY INFORMATION

### United States Regulatory Information

**TSCA:** All components are listed or are exempt from listing on the Toxic Substance Control Act Inventory.

**CERCLA Reportable Qty:** Zinc (CAS #7440-66-6) 1,000 lbs

**SARA Section 302 EHS:** Non above the reporting de minimis

**SARA Section 311/312:** Immediate Health, Delayed Health

**SARA Section 313:** This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (40CFR 372). Zinc (CAS \$ 7440-66-6) Zinc oxide (CAS# 1314-13-2).

**US State Right- to-Know Regulations:** **New Jersey, Massachusetts, Pennsylvania, Rhode Island**

**California Proposition 65:** No California Proposition 65 listed chemicals are known to be present.

**Canada Regulatory Information DSL/NDL :** All components are listed on or are exempt from listing on the Canadian Domestic Substance List.

## 16. OTHER INFORMATION

Prepared by: Armite Laboratories Inc.

Original Issue date: May 1, 2015

**Disclaimer:** The information contained herein is believed to be reliable. However, Armite Laboratories does not assume responsibility for any results obtained by anyone over whose methods Armite has no control. It is the user's responsibility to determine the suitability of any of Armite's products or any production method mentioned herein for a particular use or purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any of Armite's products. As such, Armite Laboratories specifically disclaims all warranties or guarantees, expressed or implied, as to the suitability of a particular purpose, arising from the sales or use of any Armite product. Armite Laboratories Inc. further disclaims any liability for consequential or incidental damages of any, including loss of profits.