

Issue Date 02-May-2013

Revision Date 29-Sept-2015

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

### Product identifier

**Product Name** Mil Spec-2104H 15W40 MC-3889

### Other means of identification

**Product Code** 706

**Revision Number** 2879

**Synonyms** None

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

**Recommended Use** Lubricant.

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

U.S. Lubricants A Division of U.S. Venture, Inc. 425 Better Way Appleton, WI 54915

### Emergency telephone number

**Company Phone Number** 800-490-4900

**24 Hour Emergency Phone Number** 800-424-9300 (CHEMTREC 705487)

## 2. HAZARDS IDENTIFICATION

### Classification

Serious eye damage/eye irritation	Category 2B
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### Label elements

#### Emergency Overview

#### Warning

#### Hazard statements

Causes eye irritation

**Appearance** Viscous

**Physical state** Liquid

**Odor** Mild Petroleum

### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses (if present and easy to do). Continue rinsing.  
If eye irritation persists: Get medical advice/attention

- Harmful to aquatic life with long lasting effects
- Harmful to aquatic life

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
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Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	90-99	*
Zinc alkyldithiophosphate	4259-15-8	1-5	*

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

#### 4. FIRST AID MEASURES

##### First aid measures

<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin Contact</b>	If skin irritation persists, call a physician. Wash contaminated clothing before reuse. Wash with soap and water.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Do NOT induce vomiting. Get medical attention. Drink 1 or 2 glasses of water.

##### 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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** Caution: Use of water spray when fighting fire may be inefficient.

##### Specific hazards arising from the chemical

No information available.

##### Explosion data

**Sensitivity to Mechanical Impact** None.  
**Sensitivity to Static Discharge** None.

##### 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.

##### UNUSUAL FIRE & EXPLOSION HAZARDS

Toxic Fumes may be evolved on burning or exposure to heat. Pressure may increase in overheated closed containers. Store below 120°F

#### 6. ACCIDENTAL RELEASE MEASURES

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

**Personal precautions** Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. Stop leak if you can do it without risk.

##### Environmental precautions

**Environmental precautions** 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.

**Methods for cleaning up** Soak up with inert absorbent material. Prevent product from entering drains. Pick up and transfer to properly labeled containers.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing fume/mist/vapors/spray.

#### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep containers tightly closed in a dry, cool and well-ventilated place. Store at temperatures not exceeding 120°F.

**Incompatible materials** Incompatible with oxidizing agents. Incompatible with strong acids and bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

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

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective nitrile or Neoprene™ gloves.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General Hygiene Considerations** Do not eat, drink or smoke when using this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid	<b>Odor</b>	Mild Petroleum
<b>Appearance</b>	Viscous	<b>Odor threshold</b>	No information available
<b>Color</b>	Amber		

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
pH	Essentially Neutral	

<b>Melting point/freezing point</b>	No information available
<b>Boiling point / boiling range</b>	No information available
<b>Flash point</b>	414°F
<b>Evaporation rate</b>	Less than 0.01 (@1ATM and 25°C. n-butyl acetate=1
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	10% (Estimated Value)
<b>Lower flammability limit:</b>	1% (Estimated Value)
<b>Vapor pressure</b>	Less than 0.01 mm HG
<b>Vapor density</b>	Greater than 1 (Air=1)
<b>Specific Gravity</b>	0.884 lbs/gal: 7.36
<b>Water solubility</b>	Insoluble in water
<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>	14.7-15.4 cSt@ 100°C
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	Negligible
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY****Reactivity**

Not Applicable

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous polymerization**

Hazardous polymerization does not occur.

**Conditions to avoid**

Strong oxidizing agents. Heat, flames and sparks.

**Incompatible materials**

Incompatible with oxidizing agents. Incompatible with strong acids and bases.

**Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Product Information**

No data available

**Inhalation**

Avoid breathing vapors or mists. Inhalation of vapors in high concentration may cause irritation of respiratory system.

<b>Eye contact</b>	Contact with eyes may cause irritation.
<b>Skin Contact</b>	Prolonged contact may cause redness and irritation.
<b>Ingestion</b>	Unlikely to cause harm if accidentally swallowed in small doses, though larger quantities may cause nausea and diarrhea.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Zinc alkyldithiophosphate 4259-15-8	= 3100 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	-

**Information on toxicological effects**

**Symptoms** No information available.

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

<b>Skin corrosion/irritation</b>	Irritating to skin.
<b>Serious eye damage/eye irritation</b>	Irritating to eyes.
<b>Irritation</b>	May cause skin and eye irritation. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION.
<b>Sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7	A2	Group 1		X

<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration hazard</b>	No information available.

**Numerical measures of toxicity - Product Information****12. ECOLOGICAL INFORMATION****Ecotoxicity**

Harmful to aquatic life with long lasting effects

0.4% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50
Zinc alkyldithiophosphate 4259-15-8	1.0 - 5.0: 96 h Pseudokirchneriella subcapitata mg/L EC50	10.0 - 35.0: 96 h Pimephales promelas mg/L LC50 semi-static 1.0 - 5.0: 96 h Pimephales promelas mg/L LC50 static		1 - 1.5: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

Chemical Name	Partition coefficient
Zinc alkyldithiophosphate 4259-15-8	2.86

Other adverse effects No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

Chemical Name	California Hazardous Waste Status
Zinc alkyldithiophosphate 4259-15-8	Toxic

### 14. TRANSPORT INFORMATION

DOT Not regulated

ICAO (air) Not regulated

IATA Not regulated

### 15. REGULATORY INFORMATION

#### International Inventories

<b>TSCA</b>	All components of this material are on the US TSCA Inventory or are exempt.
<b>DSL/NDL</b>	Does not comply
<b>EINECS/ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>IECSC</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AICS</b>	Does not comply

#### Legend:

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

#### US Federal Regulations

##### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No.	SARA 313 - Threshold Values %
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Zinc alkyldithiophosphate - 4259-15-8	4259-15-8	1.0
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**SARA 311/312 Hazard Categories**

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

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc alkyldithiophosphate 4259-15-8		X		

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Zinc alkyldithiophosphate 4259-15-8	X		X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not Applicable

**16. OTHER INFORMATION**

<b>NFPA</b>	Health hazards 2	Flammability 1	Instability 0	Physical and Chemical Properties -
<b>HMIS</b>	Health hazards 2	Flammability 1	Physical hazards 0	Personal protection X

Issue Date 02-May-2013  
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**Revision Note**

No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**