

# MATERIAL SAFETY DATA SHEET

## Armor Plate with Moly-D

Last Updated October 19, 2010

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Armor Plate with Moly-D**

Product Number: 327

Company Identification: **Primrose Oil Company, Inc.**

[www.primrose.com](http://www.primrose.com)

11444 Denton Drive

P.O. Box 29665

Dallas, Texas 75229 USA

1-972-241-1100 (For product information)

1-800-633-8253 (For Emergencies Only)

**Notice:** This mixture does not contain a toxic chemical(s) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372:

### 2. COMPOSITION / INFORMATION ON INGREDIENTS

#### CONTAINING: HAZARDOUS AND/OR REGULATED COMPONENTS

<u>Chemical Name</u>	<u>Amount</u>	<u>CAS Number</u>	<u>OSHA PEL (TWA)</u>	<u>ACGIH TWA</u>
Solvent-Dewaxed Heavy Paraffinic Distillates (petroleum)	70 – 90%	64742-65-0	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Petroleum Process Oil	1 – 10%	64742-52-5	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Rheological additive	1 – 15%	Mixture	Not Listed	Not Listed

Balance of above ingredients are non-hazardous or hazardous in less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

**CALIFORNIA PROP 65:** This product does contain an ingredient(s), above the safe harbor limits, which are known to the state of California to cause cancer, birth defects, or other reproductive harm.  
Crystalline Silica

**HAZARDS DISCLOSURE:** This product does not contain known hazardous materials in reportable levels as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200. As defined under Sara 311 and 312, this product contains known hazardous materials.

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**WARNING! THIS PRODUCT IS SLIGHTLY COMBUSTIBLE (FLAMMABILITY CLASS IIIB) BUT WILL BURN. PROLONGED EXPOSURE MAY CAUSE IRRITATION TO SKIN.**

HMIS/NFPA Rating: See Section 16

#### POTENTIAL HEALTH EFFECTS

**ROUTES OF ENTRY:** Skin. Eyes, Inhalation, Ingestion.

**TARGET ORGANS:** Skin. Respiratory System

**INHALATION:** This product has a low vapor pressure and is not expected to present an inhalation hazard at

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ambient conditions. Caution should be taken to prevent aerosolization or misting of this product.

**INGESTION:** Not expected to be a normal route of entry. This product is relatively non-toxic by ingestion. Ingestion of small amounts may produce mild gastrointestinal irritation.

**SKIN CONTACT:** Prolonged contact with skin may cause irritation. Symptoms include redness, itching, and pain.

**EYE CONTACT:** This product is practically non-irritating to the eyes upon direct contact.

**CHRONIC EXPOSURE:** Prolonged and/or repeated contact with this material may produce skin irritation and inflammation. On rare occasions, prolonged and repeated exposure to oil mist poses a risk of pulmonary disease such as chronic lung inflammation. This condition is usually asymptomatic as a result of repeated small aspirations. Shortness of breath and cough are the most common symptoms.

**AGGRAVATION OF PRE-EXISTING CONDITIONS:** Personnel with pre-existing skin disorders should avoid contact with this product. This condition may make the skin more susceptible to other irritants, sensitizers, and disease.

### 4. FIRST AID MEASURES

**INHALATION FIRST AID:** Vapor pressure is very low. Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor from hot product, immediately remove from exposure and call a physician. If breathing is irregular or has stopped, start resuscitation; administer oxygen, if available. If overexposed to oil mist, remove from exposure until excessive oil mist condition subsides. GET MEDICAL ATTENTION IF CONDITION PERSISTS.

**SKIN CONTACT FIRST AID:** If contact occurs wash skin with plenty of soap and water. Remove contaminated clothing. Wash clothing before reuse. GET MEDICAL ATTENTION IF IRRITATION OCCURRS.

**EYE CONTACT FIRST AID:** If contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes lifting upper and lower eyelids occasionally. GET MEDICAL ATTENTION IF IRRITATION OCCURS OR PERSISTS.

**INGESTION FIRST AID:** Induce vomiting ONLY as directed by medical personnel. Never give anything by mouth to an unconscious person. GET MEDICAL ATTENTION IMMEDIATELY.

**NOTE TO PHYSICIANS:** Treat symptoms.

### 5. FIRE FIGHTING MEASURES

**FLAMMABLE PROPERTIES:** FLAMMABILITY CLASS: IIIB

**AUTO IGNITION TEMPERATURE:** >673°F

**FLASH POINT:** >480°F

**FLAMMABLE LIMITS IN AIR, % by Volume:** lel: NE; uel: NE

**EXTINGUISHING MEDIA:** Foam, water spray (fog), dry chemical, carbon dioxide, and vaporizing liquid type extinguishing agents may all be suitable for extinguishing fires involving this type of product.

**FIRE & EXPLOSION HAZARDS:** Slightly combustible. OSHA/NFPA Class IIIB Combustible Liquid. If heated above its flashpoint will release flammable vapors which can burn in the open or be explosive in confined spaces if exposed to ignition source. Mists or sprays may be flammable below oils normal flash point. Keep away from extreme heat or open flame.

**SPECIAL INFORMATION:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus

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with full facepiece operated in the pressure demand or other positive pressure mode.

### 6. ACCIDENTAL RELEASE MEASURES

#### SPILL CLEAN-UP PROCEDURES:

This product may be classified as an oil under Section 311 of the Clean Water Act, and under the Oil Pollution Act. Discharges or spills that enter a water body must be immediately reported to the National Response Center. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

#### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Notify appropriate authorities of spill. This material will float on water and will be transported by storm runoff. Spills to the ground should be immobilized and removed immediately. Spills to watercourses such as storm drains, sewers, ditches, streams, ponds, etc. must be contained with dikes, dams, floating booms, pads, etc. as appropriate. Recover free product. Absorb with appropriate inert materials such as sand, clay, earth, or other suitable absorbent to spill area. Remove all sources of ignition. Minimize skin contact. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas.

### 7. HANDLING AND STORAGE

**RECOMMENDED STORAGE CONDITIONS:** Protect against physical damage. Store in a cool, dry well-ventilated location away from heat or ignition sources. Keep containers tightly closed. Containers of this material may be hazardous when empty since they retain residues. Observe all warnings and precautions listed for the product.

**HANDLING (PERSONNEL):** Handle in accordance with good industrial hygiene and safety practices. Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Avoid breathing vapors or mists. Do not eat, drink or smoke in work area. Wash thoroughly after handling.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**AIRBORNE EXPOSURE LIMITS:** See Section 2 above.

**VENTILATION SYSTEM:** A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

**PERSONAL RESPIRATORS (NIOSH APPROVED):** If the exposure limit is exceeded and engineering controls are not feasible, a respirator may be required. Where respirators are required, you must have a written program covering the basic requirements in the OSHA respirator standard. These include training, fit testing, medical approval, cleaning, maintenance, cartridge change schedules, etc. See 29CFR1910.134 for details.

**SKIN PROTECTION:** Wear protective clothing, gloves, as appropriate to prevent skin contact.

**EYE PROTECTION:** Use safety glasses where eye contact is possible. Maintain eye wash fountain and quick-drench facilities in work area.

**GOOD HYGIENE CONDITIONS:** Wash with soap and water before meals and at the end of each work shift. Good manufacturing practices require amounts of any chemical be removed from the skin as soon as practical, especially before eating or smoking.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

**FORM:** Smooth textured

**COLOR:** Metallic Green

**ODOR:** Mild Odor

**BOILING POINT:** NE

**SOLUBILITY IN WATER:** Insoluble

**SPECIFIC GRAVITY:** 0.9 (Water =1)

**MELTING POINT:** NA

**EVAPORATION RATE (BuAc=1):** NE

**AUTO IGNITION TEMPERATURE:** >673°F

**FLASH POINT:** >480°F

**pH:** NE

**VAPOR PRESSURE:** NE

**VAPOR DENSITY:** NE

### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under ordinary conditions of use and storage.

**CONDITIONS TO AVOID:** Heat, flame and ignition sources.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**INCOMPATIBILITY WITH OTHER MATERIALS:** May react with strong oxidizers such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite.

**HAZARDOUS DECOMPOSITION:** Combustion may produce carbon monoxide and other asphyxiants.

### 11. TOXICOLOGICAL INFORMATION

#### TOXICOLOGICAL DATA:

##### SKIN EFFECTS

Prolonged or repeated skin contact with this product tends to remove skin oils, possibly leading to irritation and dermatitis.

Carcinogenic effects: Not available.

Mutagenic effects: Not available.

Teratogenic effects: Not available.

Cancer Lists

---NTP Carcinogen---

#### Ingredient

#### Known

#### Anticipated

#### IARC Category

Crystalline Silica

Yes

Yes

Group1

Balance of ingredients

No

No

No

### 12. ECOLOGICAL INFORMATION

#### ENVIRONMENTAL FATE:

If applied to leaves, this product may kill grasses and small plants by interfering with transpiration and respiration. This product is not toxic to fish but may coat gill structures resulting in suffocation if spilled in shallow, running water. Product may be moderately toxic to amphibians by preventing dermal respiration. This product may cause gastrointestinal distress in birds and mammals through ingestion during pelage grooming.

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### ENVIRONMENTAL TOXICITY:

This product is rapidly biodegradable. Biodegradation is possible within 90 to 120 days in aerobic environments at temperatures above 70°F.

## 13. DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL:

Recover, reclaim or recycle when practical.

Dispose of material in accordance with federal, state and local requirements. For proper disposal of used material, an assessment must be completed to determine the proper and permissible waste management options permitted under applicable rules, regulations and/or laws governing your location.

## 14. TRANSPORTATION INFORMATION

Domestic (Land, D.O.T.), International (Water, I.M.O.), International (Air, I.C.A.O.)

NOT HAZARDOUS BY DOT REGULATIONS  
CLASS: NA  
PRODUCT LABEL: Armor Plate with Moly-D  
UN NUMBER: NA  
PACKING GROUP: NA  
D.O.T. SHIPPING NAME: Non Regulated  
PRODUCT RQ : NA  
ERG Guide Number: NA  
SUPPLEMENTAL HAZARD: None

## 15. REGULATORY INFORMATION

### FEDERAL REGULATORY STATUS

#### Chemical Inventory Status - Part 1

Ingredient	<u>TSCA</u>	<u>EC</u>	<u>Japan</u>	<u>Australia</u>
All Ingredients	YES	YES	YES	YES

#### Chemical Inventory Status - Part 2

Ingredient	<u>Korea</u>	<u>DSL</u>	<u>CANADA</u>	<u>Phil.</u>
All Ingredients	YES	YES	<u>NDSL</u> NO	YES

#### Federal, State & International Regulations - Part 1

Ingredient	<u>-SARA 302-</u>		<u>List</u>	<u>-SARA 313-</u>
All Ingredients	<u>RQ</u>	<u>TPQ</u>	YES	<u>Chemical Catalog</u> NO
Ingredient	<u>CERCLA</u>		<u>-RCRA-</u>	<u>-TSCA-</u>
All Ingredients	YES		<u>261.33</u> NO	<u>8(d)</u> NO

Antimony  
dialkyldithiocarbamate

This product does not have a component(s) which are subject to SARA 313 Annual Reporting Requirements:

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No

Clean Water Act (CWA) 307: Antimony dialkyldithiocarbamate <1.0%

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

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Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

**SARA 311/312:** Acute: Yes Chronic: No Fire: Yes Pressure: No

Reactivity: No (Pure / Liquid)

### STATE REGULATIONS:

#### PROP 65 - WARNING:

THIS PRODUCT DOES CONTAIN A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

**Crystalline Silica <1.0%**

**WARNING! This product contains a component that is known to the State of California to cause cancer.**

**RCRA 40 CFR:** None.

### CANADIAN REGULATIONS:

**WHMIS:** This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

**WHIMS Classification:** Not Controlled

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA). This material or all of its components are listed on the Canadian Domestic Substances List (DSL). This material or all of its components are listed (or considered as having been notified) on the European Inventory of Existing Chemical Substances (EINECS). Other inventory lists:, Korea (TCCL), Australia (AICS), China (Draft), PICCS (Philippines-RA6969), Japan (ENCS METI/MOL).

## 16. OTHER INFORMATION

Hazardous Material Information System (HMIS):	<b>Health</b>	<b>1</b>
	<b>Flammability</b>	<b>1</b>
	<b>Reactivity</b>	<b>0</b>
	<b>Personal Protection</b>	<b>B</b>

### National Fire Protection Association (NFPA) 1-Health, 1-Flammability, 0-Reactivity

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

Protective Equipment: GOGGLES & SHIELD; PROPER GLOVES;

Part Number: 327

Supersedes Date: New

### ADDITIONAL INFORMATION:

The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process. This Material Safety Data Sheet (MSDS) has been reviewed to fully comply with the guidance contained in the ANSI MSDS standard (ANSI Z400.1-2004)

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Primrose Oil Company, Inc. The data on this sheet is related only to the specific material designated herein. Primrose Oil Company, Inc. assumes no legal responsibility for use or reliance upon this data.

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END OF MSDS