

**ASHLAND**  
**SAFETY DATA SHEET**

Page: 1  
Revision Date: 03/29/2011  
Print Date: 2/9/2012  
MSDS Number: R0211744  
Version: 1.10

VALVOLINE® PALLADIUM® #2 WITH  
MOLY GREASE  
VV70111

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE  
COMPANY/UNDERTAKING**

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone number	1-800-ASHLAND (1-800-274-5263)

Product name	VALVOLINE® PALLADIUM® #2 WITH MOLY GREASE
Product code	VV70111
Product Use Description	No data

**2. HAZARDS IDENTIFICATION**

Emergency Overview

Appearance: liquid, grey

CAUTION! MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE DERMATITIS AND BURNS. MAY BE HARMFUL IF INHALED.

Potential Health Effects

Exposure routes

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

Eye contact

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin contact

Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

Ingestion

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

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**Inhalation**

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

**Aggravated Medical Condition**

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, lung (for example, asthma-like conditions)

**Symptoms**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways)

**Target Organs**

No data

**Carcinogenicity**

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

**Reproductive hazard**

There are no data available for assessing risk to the fetus from maternal exposure to this material.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Hazardous Components	CAS-No.	Concentration
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHT	64742-52-5	>=80-<90%
DISTILLATES (PETROLEUM), SOLVENT- DEWAXED HEAVY PARAFFINIC	64742-65-0	>=40-<50%
MOLYBDENUM DISULFIDE	1317-33-5	>=5-<10%

**4. FIRST AID MEASURES**

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**Eyes**

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

**Skin**

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

**Ingestion**

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

**Inhalation**

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

**Notes to physician**

**Hazards:** Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of longterm sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

**Treatment:** No information available.

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media**

Dry chemical, Carbon dioxide (CO<sub>2</sub>), Water spray

**Hazardous combustion products**

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Aldehydes, carbon dioxide and carbon monoxide, Ketones

**Precautions for fire-fighting**

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

**Environmental precautions**

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

**Methods for cleaning up**

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

**Other information**

Comply with all applicable federal, state, and local regulations.

**7. HANDLING AND STORAGE**

**Handling**

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

**Storage**

Store in a cool, dry, ventilated area.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

<b>DISTILLATES (PETROLEUM HEAVY NAPHT</b>	<b>1), HYDROTREATED</b>	<b>64742-52-5</b>	
OSHA Z1	Permissible exposure limit	500 ppm	
OSHA Z1	Permissible exposure limit	2,000 mg/m3	
NIOSH	Recommended exposure limit (REL):	5 mg/m3	Mist.
NIOSH	Short term exposure limit	10 mg/m3	Mist.
OSHA Z1	Permissible exposure limit	5 mg/m3	Mist.
ACGIH	time weighted average	5 mg/m3	Inhalable fraction.
<b>DISTILLATES (PETROLEUM), SOLVENT- DEWAXED HEAVY PARAFFINIC</b>		<b>64742-65-0</b>	
OSHA Z1	Permissible exposure limit	500 ppm	
OSHA Z1	Permissible exposure limit	2,000 mg/m3	
NIOSH	Recommended exposure limit (REL):	5 mg/m3	Mist.
NIOSH	Short term exposure limit	10 mg/m3	Mist.
OSHA Z1	Permissible exposure limit	5 mg/m3	Mist.
ACGIH	time weighted average	5 mg/m3	Inhalable fraction.
<b>MOLYBDENUM DISULFIDE</b>		<b>1317-33-5</b>	
ACGIH	time weighted average	3 mg/m3	Respirable fraction.
ACGIH	time weighted average	10 mg/m3	Inhalable fraction.
OSHA Z1	Permissible exposure limit	15 mg/m3	Total dust.

**General advice**

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

**Exposure controls**

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

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**Eye protection**

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

**Skin and body protection**

Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Wear resistant gloves (consult your safety equipment supplier).  
Discard gloves that show tears, pinholes, or signs of wear.

**Respiratory protection**

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by airpurifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an airpurifying respirator may not provide adequate protection.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	liquid
Form	paste
Colour	grey
Odour	mild
Boiling point/boiling range	(>)700 °F / 371 °C
Melting point/range	no data available
Sublimation point	no data available
pH	no data available
Flash point	not applicable
Ignition temperature	no data available
Evaporation rate	no data available
Lower explosion limit/Upper explosion limit	no data available
Particle size	no data available
Vapour pressure	(<)1.000 mmHg @ 100.00 °F / 37.78 °C
Relative vapour density	no data available
Density	0.8918 g/cm3 @ 77 °F / 25 °C

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<b>Bulk density</b>	No data
<b>Water solubility</b>	no data available
<b>Solubility(ies)</b>	no data available

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Partition coefficient: n-octanol/water	no data available
log Pow	no data available
Autoignition temperature	no data available
Viscosity, dynamic	no data available
Viscosity, kinematic	no data available
Solids in Solution	no data available
Decomposition temperature	no data available
Burning number	no data available
Dust explosion constant	no data available
Minimum ignition energy	no data available

## 10. STABILITY AND REACTIVITY

### Stability

Stable.

### Conditions to avoid

excessive heat

### Incompatible products

Strong oxidizing agents

### Hazardous decomposition products

No data

### Hazardous reactions

Product will not undergo hazardous polymerization.

### Thermal decomposition

No data



**11. TOXICOLOGICAL INFORMATION**

**Acute oral toxicity**

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHT : LD 50 Rat: > 5 g/kg  
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC : LD 50 Rat: > 5,000 mg/kg  
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MOLYBDENUM DISULFIDE : LD Lo Rat: 6 g/kg

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**Acute inhalation toxicity**

DISTILLATES (PETROLEUM), HYDROTREATED: no data available  
HEAVY NAPHT  
DISTILLATES (PETROLEUM), SOLVENTDEWAXED : no data available  
HEAVY PARAFFINIC  
MOLYBDENUM DISULFIDE : LC 50 Rat: > 2,820 mg/m3; 4 h

**Acute dermal toxicity**

DISTILLATES (PETROLEUM), HYDROTREATED: LD 50  
HEAVY NAPHT Rabbit:  
> 5 g/kg  
DISTILLATES (PETROLEUM), SOLVENTDEWAXED : LD 50  
HEAVY PARAFFINIC Rabbit:  
> 5,000 mg/kg  
MOLYBDENUM DISULFIDE : no data available

**12. ECOLOGICAL INFORMATION**

**Biodegradability**

DISTILLATES (PETROLEUM), HYDROTREATED: no data available  
HEAVY NAPHT  
DISTILLATES (PETROLEUM), SOLVENTDEWAXED : no data available  
HEAVY PARAFFINIC  
MOLYBDENUM DISULFIDE : no data available

**Bioaccumulation**

DISTILLATES (PETROLEUM), HYDROTREATED: no data available  
HEAVY NAPHT

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DISTILLATES (PETROLEUM), SOLVENTDEWAXED : no data available  
HEAVY PARAFFINIC  
MOLYBDENUM DISULFIDE : no data available

**Ecotoxicity effects**

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**Toxicity to fish**

DISTILLATES (PETROLEUM), HYDROTREATED : no data available  
HEAVY NAPHT  
DISTILLATES (PETROLEUM), SOLVENT- : no data available  
DEWAXED HEAVY PARAFFINIC  
MOLYBDENUM DISULFIDE : no data available

**Toxicity to daphnia and other aquatic invertebrates.**

DISTILLATES (PETROLEUM), HYDROTREATED: no data available  
HEAVY NAPHT  
DISTILLATES (PETROLEUM), SOLVENTDEWAXED : no data available  
HEAVY PARAFFINIC  
MOLYBDENUM DISULFIDE : no data available

**Toxicity to algae**

DISTILLATES (PETROLEUM), HYDROTREATED: no data available  
HEAVY NAPHT  
DISTILLATES (PETROLEUM), SOLVENTDEWAXED : no data available  
HEAVY PARAFFINIC  
MOLYBDENUM DISULFIDE : no data available

**Toxicity to bacteria**

DISTILLATES (PETROLEUM), HYDROTREATED: no data available  
HEAVY NAPHT  
DISTILLATES (PETROLEUM), SOLVENTDEWAXED : no data available  
HEAVY PARAFFINIC  
MOLYBDENUM DISULFIDE : no data available

**Biochemical Oxygen Demand (BOD)**

DISTILLATES (PETROLEUM), HYDROTREATED: no data available  
HEAVY NAPHT  
DISTILLATES (PETROLEUM), SOLVENTDEWAXED : no data available  
HEAVY PARAFFINIC  
MOLYBDENUM DISULFIDE : no data available

**Chemical Oxygen Demand (COD)**

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DISTILLATES (PETROLEUM), HYDROTREATED: no data available  
HEAVY NAPHT  
DISTILLATES (PETROLEUM), SOLVENTDEWAXED : no data available  
HEAVY PARAFFINIC  
MOLYBDENUM DISULFIDE : no data available

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**Additional ecological information**

DISTILLATES (PETROLEUM), HYDROTREATED  
HEAVY NAPHT : no data available  
DISTILLATES (PETROLEUM), SOLVENTDEWAXED : no data available  
HEAVY PARAFFINIC  
MOLYBDENUM DISULFIDE : no data available

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods**

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

**14. TRANSPORT INFORMATION**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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**U.S. DOT - ROAD**

Not dangerous goods

**U.S. DOT - RAIL**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**TRANSPORT CANADA - ROAD**

Not dangerous goods

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**TRANSPORT CANADA - RAIL**

Not dangerous goods

**TRANSPORT CANADA - INLAND WATERWAYS**

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Not dangerous goods

**INTERNATIONAL MARITIME DANGEROUS GOODS**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

Not dangerous goods

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**15. REGULATORY INFORMATION**

**California Prop. 65**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**SARA Hazard Classification**  
Acute Health Hazard

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SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**New Jersey RTK Label Information**

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHT 64742-52-5  
 DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY 64742-65-0 PARAFFINIC  
 MOLYBDENUM DISULFIDE 1317-33-5  
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**Pennsylvania RTK Label Information**

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHT 64742-52-5  
 DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY 64742-65-0  
 PARAFFINIC  
 MOLYBDENUM DISULFIDE 1317-33-5

**Notification status**

Korea. Toxic Chemical Control Law (TCCL) List y (positive listing)  
 China. Inventory of Existing Chemical Substances y (positive listing)  
 Australia. Industrial Chemical (Notification and Assessment) y (positive listing)  
 Act  
 New Zealand. Inventory of Chemicals (NZIoC), as published y (positive listing)  
 by ERMA New Zealand  
 Philippines. The Toxic Substances and Hazardous and Nuclear y (positive listing)  
 Waste Control Act  
 US. Toxic Substances Control Act y (positive listing)  
 EU. EINECS y (positive listing)  
 Canada. Canadian Environmental Protection Act (CEPA). y (positive listing)  
 Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)

	HMIS	NFPA
Health	1	1

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Flammability	1	1
Physical hazards	0	
Instability		0
Specific Hazard	--	--

**16. OTHER INFORMATION**

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).



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