

VALVOLINE® PALLADIUM® #2  
WITH MOLY GREASE VV70110

**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	1-800-ASHLAND (1-800-274-5263)
Product name	VALVOLINE® PALLADIUM® #2 WITH MOLY GREASE	
Product code	VV70110	
Product Use Description	No data	

**2. HAZARDS IDENTIFICATION**

**Emergency Overview**

Appearance: liquid,, grey

CAUTION! PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION.

**Potential Health Effects**

**Exposure routes**

Skin contact, Eye Contact, Inhalation, Ingestion

**Eye contact**

Unlikely to cause eye irritation or injury.

**Skin contact**

Unlikely to cause skin irritation or injury. Prolonged or repeated contact may dry and crack the skin.

**Ingestion**

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

**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

VALVOLINE® PALLADIUM® #2  
WITH MOLY GREASE VV70110

material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful.

**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**

<b>Components</b>	<b>CAS-No.</b>	<b>Concentration</b>
PETROLEUM DISTILLATES	64742-52-5	>=80-<90%
PETROLEUM DISTILLATES	NJTS# 800986-5245P	>=40-<50%
MOLYBDENUM DISULFIDE	1317-33-5	>=5-<10%

**4. FIRST AID MEASURES**

**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.

VALVOLINE® PALLADIUM® #2  
WITH MOLY GREASE VV70110

**Skin**

Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

**Ingestion**

Do not induce vomiting. Give one glass of milk or water, and get medical attention immediately. If possible, do not leave victim unattended.

**Inhalation**

First aid is not applicable.

**Notes to physician**

**Hazards:** No information available.

**Treatment:** No information available.

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media**

Carbon dioxide (CO2), Dry chemical, Foam

**Hazardous combustion products**

May form:, carbon dioxide and carbon monoxide

**Precautions for fire-fighting**

Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). DO NOT direct a solid stream of water or foam into hot, burning pools of liquid since this may cause frothing and increase fire intensity. Frothing can be violent and possibly endanger any firefighter standing too close to the burning liquid.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

No data

**Environmental precautions**

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

VALVOLINE® PALLADIUM® #2  
WITH MOLY GREASE VV70110

**Methods for cleaning up**

Shovel material into containers. Thoroughly sweep area of spill to clean up any residual material.

**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.

**Storage**

Store in a cool, dry, ventilated area.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

<b>PETROLEUM DISTILLATES</b>		<b>64742-52-5</b>
OSHA Z1	Permissible exposure limit	500 ppm
OSHA Z1	Permissible exposure limit	2,000 mg/m3
OSHA Z1A	time weighted average	400 ppm
OSHA Z1A	time weighted average	1,600 mg/m3
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	400 ppm
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	1,600 mg/m3
<b>PETROLEUM DISTILLATES</b>		<b>NJTS# 800986-5245P</b>
OSHA Z1	Permissible exposure limit	500 ppm
OSHA Z1	Permissible exposure limit	2,000 mg/m3
OSHA Z1A	time weighted average	400 ppm
OSHA Z1A	time weighted average	1,600 mg/m3
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	400 ppm

VALVOLINE® PALLADIUM® #2  
WITH MOLY GREASE VV70110

US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	1,600 mg/m3	
ACGIH	time weighted average	5 mg/m3	Mist.
ACGIH	Short term exposure limit	10 mg/m3	Mist.
ACGIH NIC	time weighted average	0.2 mg/m3	Inhalable fraction.

**MOLYBDENUM DISULFIDE** **1317-33-5**

ACGIH	time weighted average	10 mg/m3	Inhalable fraction.
ACGIH	time weighted average	3 mg/m3	Respirable fraction.
OSHA Z1	Permissible exposure limit	15 mg/m3	Total dust.
OSHA Z1A	time weighted average	10 mg/m3	Total dust.
US CA OEL	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):	10 mg/m3	

**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**

General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, 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.

**Eye protection**

Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

**Skin and body protection**

Wear resistant gloves (consult your safety equipment supplier).  
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.

VALVOLINE® PALLADIUM® #2  
WITH MOLY GREASE VV70110

**Respiratory protection**

Respiratory protection is not required under normal conditions of use.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state</b>	liquid
<b>Form</b>	paste
<b>Colour</b>	grey
<b>Odour</b>	mild
<b>Boiling point/boiling range</b>	371.00 °C / 700 °F
<b>pH</b>	No data
<b>Flash point</b>	No data
<b>Evaporation rate</b>	No data
<b>Explosion limits</b>	No data
<b>Vapour pressure</b>	1.00 mmHg @ 100.00 °F / 37.78 °C
<b>Vapour density</b>	No data
<b>Density</b>	0.8918 g/cm <sup>3</sup> @ 77 °F / 25 °C
<b>Solubility</b>	No data
<b>Partition coefficient: n-octanol/water</b>	No data
<b>log Pow</b>	no data available
<b>Autoignition temperature</b>	No data

**10. STABILITY AND REACTIVITY**

**Stability**

Stable

**Conditions to avoid**

None known.

**Incompatible products**

Avoid contact with:, Strong oxidizing agents

**Hazardous decomposition products**

carbon dioxide and carbon monoxide

VALVOLINE® PALLADIUM® #2  
WITH MOLY GREASE VV70110

**Hazardous reactions**

Product will not undergo hazardous polymerization.

**Thermal decomposition**

No data

**11. TOXICOLOGICAL INFORMATION**

**Acute oral toxicity**

PETROLEUM DISTILLATES	LD 50 Rat: > 5 g/kg
PETROLEUM DISTILLATES	LD 50 Rat: > 5,000 mg/kg
MOLYBDENUM DISULFIDE	LD Lo Rat: 6 g/kg

**Acute inhalation toxicity**

PETROLEUM DISTILLATES	no data available
PETROLEUM DISTILLATES	no data available
MOLYBDENUM DISULFIDE	LC 50 Rat: > 2,820 mg/m <sup>3</sup> , 4 h

**Acute dermal toxicity**

PETROLEUM DISTILLATES	LD 50 Rabbit: > 5 g/kg
PETROLEUM DISTILLATES	LD 50 Rabbit: > 5,000 mg/kg
MOLYBDENUM DISULFIDE	no data available

**12. ECOLOGICAL INFORMATION**

**Aquatic toxicity**

**Acute and Prolonged Toxicity to Fish**

No data

**Acute Toxicity to Aquatic Invertebrates**

No data

**Environmental fate and pathways**

No data



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

Page: 9  
Revision Date: 11/12/2009  
Print Date: 4/21/2010  
MSDS Number: R0211744  
Version: 1.9

VALVOLINE® PALLADIUM® #2  
WITH MOLY GREASE VV70110

	<b>Health</b>	<b>Flammability</b>	<b>Reactivity</b>	<b>Other</b>
<b>HMIS</b>	1	1	0	
<b>NFPA</b>	1	1	0	

**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).