

## SAFETY DATA SHEET

Revision Date: 09/08/2011

Print Date: 2/9/2012

MSDS Number: R0091437

Version: 4.0

Valvoline™ HP 80W-90 GEAR OIL  
VV835

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

Ashland  
P.O. Box 2219  
Columbus, OH 43216

Regulatory Information Number  
Telephone

1-800-325-3751  
614-790-3333  
Emergency telephone number  
1-800-ASHLAND (1-800-  
2745263)

Product name Valvoline™ HP 80W-90 GEAR OIL  
Product code VV835

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance: liquid, amber

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

#### 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.

## SAFETY DATA SHEET

Revision Date: 09/08/2011  
Print Date: 2/9/2012  
MSDS Number: R0091437  
Version: 4.0

Valvoline™ HP 80W-90 GEAR OIL  
VV835

### 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 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: acne, 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. / Trade Secret No.	Concentration
HEAVY PARAFFINIC DISTILLATE	64742-54-7	>=70-<80%

## SAFETY DATA SHEET

Revision Date: 09/08/2011

Print Date: 2/9/2012

MSDS Number: R0091437

Version: 4.0

Valvoline™ HP 80W-90 GEAR OIL  
VV835

DISTILLATES (PETROLEUM), SOLVENTDEWAXED PARAFFINIC	HEAVY	64742-65-0	>=20-<30%
MINERAL OIL			>=1-<1.5%
ALKYL PHOSPHATE			>=1-<1.5%
<b>4. FIRST AID MEASURES</b>			

### 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. lipid 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.

## SAFETY DATA SHEET

Revision Date: 09/08/2011

Print Date: 2/9/2012

MSDS Number: R0091437

Version: 4.0

Valvoline™ HP 80W-90 GEAR OIL  
VV835

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

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

**Hazardous combustion products** carbon dioxide and carbon monoxide,  
Hydrocarbons, Oxides of phosphorus

#### Precautions for fire-fighting

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. 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.

#### NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

### 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.

## SAFETY DATA SHEET

Revision Date: 09/08/2011

Print Date: 2/9/2012

MSDS Number: R0091437

Version: 4.0

Valvoline™ HP 80W-90 GEAR OIL  
VV835

### 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

DISTILLATES (PETROLEUM), SOLVENT- DEWAXED HEAVY PARAFFINIC		64742-65-0	
OSHA Z1	Permissible exposure limit	500 ppm	
OSHA Z1	Permissible exposure limit	2,000 mg/m <sup>3</sup>	
NIOSH	Recommended exposure limit (REL):	5 mg/m <sup>3</sup>	Mist.
NIOSH	Short term exposure limit	10 mg/m <sup>3</sup>	Mist.
OSHA Z1	Permissible exposure limit	5 mg/m <sup>3</sup>	Mist.
ACGIH	time weighted average	5 mg/m <sup>3</sup>	Inhalable fraction.
MINERAL OIL			
NIOSH	Recommended exposure limit (REL):	5 mg/m <sup>3</sup>	Mist.
NIOSH	Short term exposure limit	10 mg/m <sup>3</sup>	Mist.
OSHA Z1	Permissible exposure limit	5 mg/m <sup>3</sup>	Mist.
ACGIH	time weighted average	5 mg/m <sup>3</sup>	Inhalable fraction.

#### 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.

## SAFETY DATA SHEET

Revision Date: 09/08/2011

Print Date: 2/9/2012

MSDS Number: R0091437

Version: 4.0

Valvoline™ HP 80W-90 GEAR OIL  
VV835

### 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. **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
Colour	amber
Boiling point/boiling range	(>)424.9 °F / 218.3 °C @ 760.00 mmHg
Flash point	(>)432 °F / 222 °C Cleveland open cup
Evaporation rate	(>)1 Ethyl Ether
Vapour pressure	(<)0.100 mmHg
Relative vapour density	(>)1 AIR=1
Density	0.8916 g/cm3 @ 60.01 °F / 15.56 °C

## SAFETY DATA SHEET

Valvoline™ HP 80W-90 GEAR OIL  
VV835

Revision Date: 09/08/2011  
Print Date: 2/9/2012  
MSDS Number: R0091437  
Version: 4.0

	7.28 lb/gal @ 60.1 °F / 15.6 °C
<b>Viscosity, kinematic</b>	14.5 mm <sup>2</sup> /s
<b>10. STABILITY AND REACTIVITY</b>	

### Stability

Stable.

### Conditions to avoid

None known.

### Incompatible products

Strong oxidizing agents

**Hazardous decomposition products** carbon dioxide and  
carbon monoxide, Hydrocarbons

### Hazardous reactions

Product will not undergo hazardous polymerization.

## 11. TOXICOLOGICAL INFORMATION Acute oral toxicity

Acute oral toxicity - Product	: no data available
Acute oral toxicity - Components	
HEAVY PARAFFINIC DISTILLATE	: LD 50: > 15 g/kg Species: Rat
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC	: LD 50: > 5,000 mg/kg Species: Rat
Acute inhalation toxicity	
Acute inhalation toxicity - Product	: no data available

## SAFETY DATA SHEET

Revision Date: 09/08/2011  
Print Date: 2/9/2012  
MSDS Number: R0091437  
Version: 4.0

Valvoline™ HP 80W-90 GEAR OIL  
VV835

### Acute dermal toxicity

Acute dermal toxicity - Product : no data available

### Acute dermal toxicity - Components

HEAVY PARAFFINIC DISTILLATE : LD 50: > 5 g/kg Species: Rabbit

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC : LD 50: > 5,000 mg/kg Species: Rabbit

### Acute toxicity (other routes of administration)

Acute toxicity (other routes of administration) : no data available

## 12. ECOLOGICAL INFORMATION

### Biodegradability

Biodegradability - Product : no data available

### Bioaccumulation

Bioaccumulation - Product : no data available

### Ecotoxicity effects

#### Toxicity to fish

Toxicity to fish - Product : no data available

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

Toxicity to daphnia and other aquatic invertebrates. - Product : no data available

#### Toxicity to algae

Toxicity to algae - Product : no data available

### Toxicity to bacteria

#### Toxicity to bacteria -

Product : no data available



## SAFETY DATA SHEET

Valvoline™ HP 80W-90 GEAR OIL  
VV835

Revision Date: 09/08/2011  
Print Date: 2/9/2012  
MSDS Number: R0091437  
Version: 4.0

### 13. DISPOSAL CONSIDERATIONS

#### Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations.

### 14. TRANSPORT INFORMATION

#### REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LIT. QTY.
-----------	----------------------	---------------	--------------------	---------------	------------------------------

#### 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

#### TRANSPORT CANADA - RAIL

Not dangerous goods

## SAFETY DATA SHEET

Revision Date: 09/08/2011  
Print Date: 2/9/2012  
MSDS Number: R0091437  
Version: 4.0

Valvoline™ HP 80W-90 GEAR OIL  
VV835

### TRANSPORT CANADA - INLAND WATERWAYS

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

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

### SARA Hazard Classification SARA 311/312 Classification

Acute Health Hazard

### SARA 313 Component(s)

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.

## SAFETY DATA SHEET

Valvoline™ HP 80W-90 GEAR OIL  
VV835

Revision Date: 09/08/2011

Print Date: 2/9/2012

MSDS Number: R0091437

Version: 4.0

### New Jersey RTK Label Information

HEAVY PARAFFINIC DISTILLATE	64742-54-7
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC	64742-65-0
CONTENTS PARTIALLY UNKNOWN	
MINERAL OIL	
ALKYL PHOSPHATE	
DISTILLATES, PETROLEUM, SOLVENT-REFINED LIGHT PARAFFINIC	64741-88-4

### Pennsylvania RTK Label Information

HEAVY PARAFFINIC DISTILLATE	64742-54-7
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC	64742-65-0
CONTENTS PARTIALLY UNKNOWN	

### Notification status

US. Toxic Substances Control Act	y (positive listing)	
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	y (positive listing)	
Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)	
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	n (Negative listing)	
Japan. Kashin-Hou Law List	y (positive listing)	
Korea. Toxic Chemical Control Law (TCCL) List	y (positive listing)	
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	y (positive listing)	
China. Inventory of Existing Chemical Substances	y (positive listing)	
	<b>HMIS</b>	<b>NFPA</b>
Health	1	1
Flammability	1	1
Physical hazards	0	
	<b>HMIS</b>	<b>NFPA</b>

## SAFETY DATA SHEET

Revision Date: 09/08/2011

Print Date: 2/9/2012

MSDS Number: R0091437

Version: 4.0

Valvoline™ HP 80W-90 GEAR OIL  
VV835

Instability		0
Specific Hazard	--	--
<b>16. OTHER INFORMATION</b>		

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).