

SAFETY DATA SHEET	Revision Date: 05/22/2017
	Print Date: 1/29/2018
	SDS Number: R0173308
Valvoline™ SAE 85W-140 HP GEAR OIL	Version: 1.4
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29 CFR 1910.1200 (OSHA HazCom 2012) SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

:

Product identifier

Trade name

Valvoline™ SAE 85W-140 HP GEAR OIL

Details of the supplier of the safety data	Emergency telephone number
sheet	1-800-VALVOLINE (1-800-825-8654)
Valvoline LLC	
100 Valvoline Way	Regulatory Information Number
Lexington, KY 40509	1-800-TEAMVAL
United States of America (USA)	
1-800-TEAMVAL	Product Information
	1-800-TEAMVAL

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Skin sensitization	Category 1
GHS label elements Hazard pictograms	
Signal Word	Warning
Hazard Statements	May cause an allergic skin reaction.
Precautionary Statements	 Prevention: Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves. Response: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse. Disposal: Dispose of contents/ container to an approved waste disposal plant.



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Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Classification	Concentration $(9/)$
			Concentration (%)
OLEFINSULFIDE	68937-96-2	Skin Sens. 1B; H317	2.5296
React. prod. of bis(2- methylpentan-2-		Flam. Liq. 4; H227	0.6418
yl)dithiophosphoricacid + phosphorus oxide, propylene		Acute Tox. 4; H302	
oxide and amines, C12-14-alkyl (branched)		Eye Dam. 1; H318	
		Skin Sens. 1; H317	

SECTION 4. FIRST AID MEASURES

General advice	 Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	 If breathed in, move person into fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	 Remove contaminated clothing. If irritation develops, get medical attention. If on skin, rinse well with water. First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water. Wash contaminated clothing before re-use.
In case of eye contact	 Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.
If swallowed	: Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.



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If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed	:	May cause an allergic skin reaction. No symptoms known or expected.
Notes to physician	:	No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray Foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during firefighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	carbon dioxide and carbon monoxide Hydrocarbons Sulphur oxides
Specific extinguishing methods	:	
		Product is compatible with standard fire-fighting agents.
Further information	:	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.



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Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.
Other information	:	Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	 Do not breathe vapours/dust. Do not smoke. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Container hazardous when empty. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	 Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type	Control	Basis
		(Form of	parameters /	
		exposure)	Permissible	
			concentration	
MINERAL OIL		TWA	5 mg/m3	OSHA Z-1
			Mist	
		TWA	5 mg/m3	ACGIH
			Inhalable fraction	
		TWA	5 mg/m3	OSHA P0
			Mist	
		TWA	5 mg/m3	NIOSH REL
			Mist	
		ST	10 mg/m3	NIOSH REL
			Mist	



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			PEL	5 mg/m3 particulate	CAL PEL
Hazardous components with			ntrol paramete	rs	
Components		CAS-No.			
Engineering measures	:	ventilation to r	naintain exposu below levels tha	(general and/or local re below exposure gu tt cause known, susp	uidelines (if
Personal protective equipmed Hand protection	ent				
Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.			
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	:	concentration Discard glove	othing protection accor of the dangerou s that show tear	rding to the amount a is substance at the w s, pinholes, or signs t your safety equipme	ork place. of wear.
Hygiene measures	:	Wash hands b	oefore breaks ar	nd at the end of work	day.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Colour	: amber
Odour	: No data available
Odour Threshold	: No data available
рН	: No data available
Melting point/freezing point	: No data available
Boiling point/boiling range	: 600.01 °F / 315.56 °C (1,013.333333 hPa)
Flash point	Calculated Phase Transition Liquid/Gas : > 390 °F / > 199 °C



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Method: Cleveland open cup

Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit Lower explosion limit		7 %(V) Calculated Explosive Limit 0.9 %(V) Calculated Explosive Limit
Vapour pressure	:	0.1 hPa (20 °C) Calculated Vapor Pressure
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	0.9040 g/cm3 (15.56 °C)
Solubility(ies) Water solubility	:	No data available
,	:	No data available No data available
Water solubility	:	
Water solubility Solubility in other solvents Partition coefficient: n-	:	No data available
Water solubility Solubility in other solvents Partition coefficient: n- octanol/water	:	No data available No data available
Water solubility Solubility in other solvents Partition coefficient: n- octanol/water Thermal decomposition Viscosity	:	No data available No data available No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No decomposition if stored and applied as directed.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Product will not undergo hazardous polymerization.
Conditions to avoid	: None known.
Incompatible materials	: Strong oxidizing agents



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Hazardous decomposition	
products	carbon dioxide and carbon monoxide Sodium oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of	:	Inhalation
exposure		Skin contact
		Eye Contact
		Ingestion

Acute toxicity

Not classified based on available information. <u>Components:</u> OLEFINSULFIDE: Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 401 Assessment: Not classified as acutely toxic by ingestion under

	GHS. Remarks: No mortality observed at this dose.
Acute dermal toxicity	 LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 402 Assessment: Not classified as acutely toxic by dermal absorption under GHS.

Remarks: No mortality observed at this dose.

React. prod. of bis(2-methylpentan-2-yl)dithiophosphoricacid + phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched):

Acute oral toxicity	: LD50 (Rat): ca. 2,000 mg/kg
	Method: OECD Test Guideline 401
	Assessment: The component/mixture is classified as acute
	oral toxicity, category 4.

Skin corrosion/irritation

Not classified based on available information.

Product: Remarks: May cause skin irritation in susceptible persons.

Components:

OLEFINSULFIDE: Result: Mild skin irritation

Serious eye damage/eye irritation Not classified based on available information. Product: Remarks: Unlikely to cause eye irritation or injury.



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Components:

OLEFINSULFIDE: Result: Slight, transient irritation

React. prod. of bis(2-methylpentan-2-yl)dithiophosphoricacid + phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched): Result: Corrosive

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction. Respiratory sensitisation: Not classified based on available information. Components: OLEFINSULFIDE: Test Type: Maximisation Test Species: Guinea pig Assessment: The product is a skin sensitiser, sub-category 1B. Method: OECD Test Guideline 406

React. prod. of bis(2-methylpentan-2-yl)dithiophosphoricacid + phosphorus oxide, propylene oxide and amines, C12-14-alkyl (branched): Test Type: Local lymph node assay Species: Mouse Method: OECD Test Guideline 429 Result: May cause sensitisation by skin contact.

Germ cell mutagenicity Not classified based on available information. Components: OLEFINSULFIDE:

Genotoxicity in vitro	: Test Type: in vitro assay Result: Positive results were obtained in some in vitro tests.
Constavisity in vivo	· Test Type: Micropuelous test

Genotoxicity in vivo : Test Type: Micronucleus test Test species: Mouse Cell type: Bone marrow Method: OECD Test Guideline 474 Result: negative

Carcinogenicity

Not classified based on available information. **Reproductive toxicity** Not classified based on available information. **STOT - single exposure** Not classified based on available information. **STOT - repeated exposure** Not classified based on available information. **Aspiration toxicity** Not classified based on available information. **Product:**





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No aspiration toxicity classification

Further information <u>Product:</u> Remarks: No data available	
Carcinogenicity:	
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity <u>Product:</u> Ecotoxicology Assessment Acute aquatic toxicity	: Acute aquatic toxicity Category 3; Harmful to aquatic life.
Chronic aquatic toxicity	: Chronic aquatic toxicity Category 3; Harmful to aquatic life with long lasting effects.
<u>Components:</u> OLEFINSULFIDE: Ecotoxicology Assessment Acute aquatic toxicity	: Harmful to aquatic life.
Chronic aquatic toxicity	: Harmful to aquatic life with long lasting effects.
React. prod. of bis(2-methylper oxide and amines, C12-14-alky Toxicity to fish	 atan-2-yl)dithiophosphoricacid + phosphorus oxide, propylene d (branched): LL50 (Oncorhynchus mykiss (rainbow trout)): ca. 24 mg/l Exposure time: 96 h Test Type: static test Test substance: WAF Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: EL50 (Water flea (Daphnia magna)): ca. 91.4 mg/l Exposure time: 48 h Test Type: static test Test substance: WAF Method: OECD Test Guideline 202



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Toxicity to algae :	ErC50 (Pseudokirchneriella subcapitata (green algae)): 15 mg/l End point: Growth inhibition Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 201
	NOEC (Pseudokirchneriella subcapitata (green algae)): 3.3 mg/l End point: Growth inhibition Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 201
Toxicity to daphnia and other : aquatic invertebrates (Chronic toxicity)	NOEC (Water flea (Daphnia magna)): 0.12 mg/l Exposure time: 21 d End point: Reproduction Test Test Type: semi-static test Test substance: WAF Method: OECD Test Guideline 211
Ecotoxicology Assessment Acute aquatic toxicity :	Toxic to aquatic life.
Chronic aquatic toxicity :	Toxic to aquatic life with long lasting effects.
Persistence and degradability Components: OLEFINSULFIDE: Biodegradability :	Result: Not readily biodegradable. Biodegradation: 13 % Exposure time: 28 d Method: OECD Test Guideline 301B
oxide and amines, C12-14-alkyl (an-2-yl)dithiophosphoricacid + phosphorus oxide, propylene (branched): Result: Not readily biodegradable. Biodegradation: 7.4 % Exposure time: 28 d Method: Modified Sturm Test
oxide and amines, C12-14-alkyl (an-2-yl)dithiophosphoricacid + phosphorus oxide, propylene (branched): Remarks: No data available

No data available



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Mobility in soil <u>Components:</u> No data available Other adverse effects No data available <u>Product:</u> Additional ecological information <u>Components:</u>	: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life with long lasting effects.
SECTION 13. DISPOSAL CONSI	DERATIONS
Disposal methods	
General advice	 The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Dispose of in accordance with all applicable local, state and federal regulations.
Contaminated packaging	 Empty remaining contents. Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

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

U.S. DOT - ROAD

Not dangerous goods	

CFR_RAIL_C

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods



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TDG_ROAD_C

Not dangerous goods

TDG_RAIL_C

Not dangerous goods

TDG_INWT_C

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

MX_DG

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no

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.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act CERCLA Reportable Quantity This material does not contain any components with a CERCLA RQ. SARA 304 Extremely Hazardous Substances Reportable Quantity This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : 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.
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.
	ct are reported in the following inventories: All components of this product are on the Canadian DSL
AICS	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory
TSCA	: On TSCA Inventory

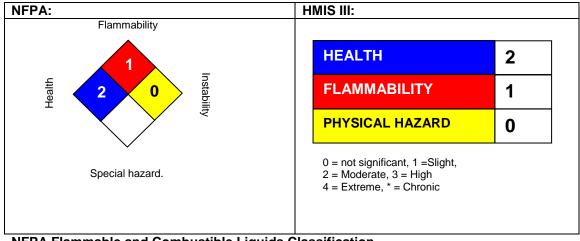
Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

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NFPA Flammable and Combustible Liquids Classification Combustible Liquid Class IIIB



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Full text of H-Statements

H227	Combustible liquid.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

Sources of key data used to compile the Safety Data Sheet Valvoline internal data including own and sponsored test reports The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

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 SDS has been prepared by Valvoline's Environmental Health and Safety Department (1-800-VALVOLINE).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit



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STOT : Specific Target Organ Toxicity TLV : Threshold Limit Value TWA : Time-weighted average vPvB : Very Persistent and Very Bioaccumulative WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act DOT : Department of Transportation FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act HMIRC : Hazardous Materials Information Review Commission HMIS : Hazardous Materials Identification System NFPA : National Fire Protection Association NIOSH : National Institute for Occupational Safety and Health OSHA : Occupational Safety and Health Administration PMRA : Health Canada Pest Management Regulatory Agency RTK : Right to Know WHMIS : Workplace Hazardous Materials Information System