

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

Conforms to EU Regulation 1907/2006/EC as amended. - SDSGHS_GB

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Product code : 868217

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use : Engine, gear & lubricating oil.

1.3 Details of the supplier of the safety data sheet SDS@valvoline.com	1.4 Emergency telephone number 00-800-825-8654 / 001-859-202-3865, or contact your local emergency telephone number at 112 Product Information
--	--

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.2 Label elements

2.3 Other hazards

Additional advice

No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
METHACRYLATE COPOLYMER			>= 1,00 - < 2,50
Di-tert-butyl polysulfide	68937-96-2 273-103-3		>= 1,00 - < 2,50

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

	01-2119540515-43-xxxx		
Amines, C10-14-tert-alkyl	701-175-2		>= 0,025 - < 0,10
(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	1213789-63-9 01-2119473797-19-xxxx		>= 0,025 - < 0,10

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : No hazards which require special first aid measures.
- 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 : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : No hazards which require special first aid measures.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Foam

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

Carbon dioxide (CO₂)
Dry chemical

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release.
Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- 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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Comply with all applicable federal, state, and local regulations.

6.2 Environmental precautions

- 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.

6.3 Methods and material for containment and cleaning up

- Methods for 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.

6.4 Reference to other sections

For further information see Section 8 and Section 13 of the safety data sheet.

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Hygiene measures : General industrial hygiene practice.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- Advice on common storage : No materials to be especially mentioned.
- Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

- Specific use(s) : No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

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.

Personal protective equipment

- 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 as appropriate:
Safety shoes
- Respiratory protection : No personal respiratory protective equipment normally required.

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	amber
Odour	:	oily
Odour Threshold	:	No data available
pH	:	Not applicable
Pour point	:	< -24 °C
Boiling point/boiling range	:	No data available
Flash point	:	192 °C Method: Pensky-Martens closed cup
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	0,8766 g/cm ³ (15,6 °C)
Solubility(ies)		
Water solubility	:	insoluble
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Decomposition temperature	:	No data available

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

Viscosity
Viscosity, dynamic : No data available
Viscosity, kinematic : 134 mm²/s (40 °C)
Oxidizing properties : No data available

9.2 Other information

Self-ignition : >
150 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Product will not undergo hazardous polymerization.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Acute toxicity

Product:

Acute oral toxicity :
Remarks: Not applicable

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

Acute inhalation toxicity : Remarks: Not applicable

Components:

OLEFINSULFIDE:

Acute oral toxicity : **LD50 (Rat): > 2.000 mg/kg**
Method: **OECD Test Guideline 401**
Assessment: **The substance or mixture has no acute oral toxicity**
Remarks: **No mortality observed at this dose.**

Acute dermal toxicity : **LD50 (Rat): > 2.000 mg/kg**
Method: **OECD Test Guideline 402**
Assessment: **The substance or mixture has no acute dermal toxicity**
Remarks: **No mortality observed at this dose.**

Components:

Amines, C10-14-tert-alkyl:

Acute oral toxicity : **LD50 Oral (Rat, male and female): 612 mg/kg**
Method: **OECD Test Guideline 401**
GLP: **yes**
Assessment: **The component/mixture is classified as acute oral toxicity, category 4.**

Acute inhalation toxicity : **LC50 (Rat, male and female): Exposure time: 4 h**
Test atmosphere: **vapour**
Method: **OECD Test Guideline 403**
GLP: **yes**
Assessment: **The component/mixture is classified as acute inhalation toxicity, category 2.**

Acute dermal toxicity : **LD50 (Rat, male and female): 251 mg/kg**
Method: **OECD Test Guideline 402**
GLP: **yes**
Assessment: **The component/mixture is classified as acute dermal toxicity, category 3.**

Components:

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:

Acute oral toxicity : **LD50 (Rat): 1.689 mg/kg**
Method: **OECD Test Guideline 401**
Remarks: **Information given is based on data obtained from similar substances.**

Acute dermal toxicity : **LD50 (Rat): > 2.000 mg/kg**
Method: **OECD Test Guideline 402**
Remarks: **No mortality observed at this dose.**
Information given is based on data obtained from similar substances.

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

Skin corrosion/irritation

Components:

METHACRYLATE COPOLYMER:

Result: No skin irritation

OLEFINSULFIDE:

Result: Mild skin irritation

Amines, C10-14-tert-alkyl:

Species: Rabbit

Result: Corrosive after 3 minutes to 1 hour of exposure

GLP: yes

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:

Species: Rabbit

Result: Corrosive after 3 minutes to 1 hour of exposure

Remarks: Information given is based on data obtained from similar substances.

Serious eye damage/eye irritation

Product:

Remarks: Unlikely to cause eye irritation or injury.

Components:

METHACRYLATE COPOLYMER:

Result: Irritating to eyes.

OLEFINSULFIDE:

Result: Slight, transient irritation

Amines, C10-14-tert-alkyl:

Species: Rabbit

Method: No information available.

Result: Corrosive

GLP: yes

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:

Species: Rabbit

Result: Corrosive

Remarks: Information given is based on data obtained from similar substances.

Respiratory or skin sensitisation

Product:

Assessment: Does not cause skin sensitisation.

Components:

OLEFINSULFIDE:

Test Type: Maximisation Test

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

Species: **Guinea pig**
Assessment: **The product is a skin sensitiser, sub-category 1B.**
Method: **OECD Test Guideline 406**

Amines, C10-14-tert-alkyl:

Test Type: **Buehler Test**
Exposure routes: **Dermal**
Species: **Guinea pig**
Assessment: **The product is a skin sensitiser, sub-category 1A.**
Method: **Buehler Test**
GLP: **yes**

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:

Assessment: **Does not cause skin sensitisation.**
Remarks: **Information given is based on data obtained from similar substances.**

Germ cell mutagenicity

Components:

OLEFINSULFIDE:

Genotoxicity in vitro : Test Type: **in vitro assay**
Result: **Positive results were obtained in some in vitro tests.**

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

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:

Genotoxicity in vitro : Test Type: **Ames test**
Test species: **Salmonella typhimurium**
Metabolic activation: **with and without metabolic activation**
Result: **negative**
Remarks: **Information given is based on data obtained from similar substances.**

Carcinogenicity

Reproductive toxicity

STOT - single exposure

Components:

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:

Exposure routes: **Inhalation**
Target Organs: **Respiratory Tract**
Assessment: **The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.**

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

STOT - repeated exposure

Components:

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:

Exposure routes: **Ingestion**

Target Organs: **Liver, Immune system, Gastro-intestinal system**

Assessment: **The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.**

Aspiration toxicity

Components:

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Further information

Product:

Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

Di-tert-butyl polysulfide

Ecotoxicology Assessment

Short-term (acute) aquatic hazard : **Harmful to aquatic life.**

Long-term (chronic) aquatic hazard : **Harmful to aquatic life with long lasting effects.**

Amines, C10-14-tert-alkyl

Ecotoxicology Assessment

Short-term (acute) aquatic hazard : **Very toxic to aquatic life.**

Acute aquatic toxicity Category 1; Very toxic to aquatic life.

Long-term (chronic) aquatic hazard : **Very toxic to aquatic life with long lasting effects.**

Chronic aquatic toxicity Category 1; Very toxic to aquatic life with long lasting effects.

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines

Toxicity to fish : **LC50 (Fish): estimated 0,06 mg/l**

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

	Exposure time: 96 h Remarks: Information given is based on data obtained from similar substances.
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 0,98 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 Remarks: Information given is based on data obtained from similar substances.
Toxicity to algae	: EC50 (Desmodesmus subspicatus (green algae)): 0,083 mg/l End point: Growth inhibition Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 Remarks: Information given is based on data obtained from similar substances.
M-Factor (Short-term (acute) aquatic hazard)	: 10
M-Factor (Long-term (chronic) aquatic hazard)	: 10

12.2 Persistence and degradability

Components:

Di-tert-butyl polysulfide

Biodegradability	: Result: Not readily biodegradable. Biodegradation: 13 % Exposure time: 28 d Method: OECD Test Guideline 301B
------------------	---

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines

Biodegradability	: Result: Readily biodegradable. Biodegradation: 66 % Exposure time: 28 d Method: Regulation (EC) No. 440/2008, Annex, C.4-C Remarks: Information given is based on data obtained from similar substances.
------------------	--

12.3 Bioaccumulative potential

Components:

Amines, C10-14-tert-alkyl

Partition coefficient: n-octanol/water	: log Pow: 2,9 (20 °C)
--	------------------------

(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines

Partition coefficient: n-octanol/water	: log Pow: estimated 6 - 8
--	----------------------------

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

Product:

Additional ecological information : 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 considerations

13.1 Waste treatment methods

Product : The product should not be allowed to enter drains, water courses or the soil.

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.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

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.

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The components of this product are reported in the following inventories:

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

ENCS : Not 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

TCSI : On the inventory, or in compliance with the inventory

TSCA : On TSCA Inventory

Inventories

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

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Further information

Internal information : R0517044

Full text of H-Statements

Other information : The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

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 (+31 (0)78 654 3500).

Sources of key data used to compile the Safety Data Sheet

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

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

ABM : Water Hazard Class for the Netherlands

ADR : Agreement concerning the International Carriage of Dangerous Goods by Road.

ADNR: Regulation for the Carriage of Dangerous Substances on the Rhine

CLP : Classification, Labelling and Packaging

CSA : Chemical Safety Assessment

CSR : Chemical Safety Report

DNEL : Derived No Effect Level.

EINECS : European Inventory of Existing Commercial Chemical Substances.

SAFETY DATA SHEET

Valvoline™ LIGHT & HD GEAR OIL 80W90
Gear Oil

Version: 11.0

Revision Date: 24.09.2021

Print Date: 14/09/2022

ELINCS : European List of Notified Chemical Substances

PEC : Predicted Effect Concentration

PEL : Permissible Exposure Limits

PNEC : Predicted No Effect Concentration

R-phrase : Risk phrase

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

RID : Regulation Concerning the International Transport of Dangerous Goods by Rail

S-phrase: Safety phrase

WGK : German Water Hazard Class