

ASHLAND®		Page: 1
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID		Version: 1.3
VV320		

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Valvoline™ MERCON® V
AUTOMATIC TRANSMISSION FLUID

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data sheet Ashland P.O. Box 2219 Columbus, OH 43216 United States of America EHS Customer Requests@ashland.com	Emergency telephone number 1-800-ASHLAND (1-800-274-5263) Regulatory Information Number 1-800-325-3751 Product Information 614-790-3333
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SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	Not a hazardous substance or mixture.	25.69

ASHLAND®		Page: 2
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID		Version: 1.3
VV320		

LUBRICATING OILS, PETROLEUM, C15-30, HYDROTREATED	72623-86-0	Asp. Tox. 1; H304	2.39
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SECTION 4. 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.
Most important symptoms and effects, both acute and delayed	: 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 long-term 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. 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)
Notes to physician	: No hazards which require special first aid measures.

ASHLAND®		Page: 3
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID		Version: 1.3
VV320		

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
- 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
- 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 : 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.
- 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 : Container hazardous when empty.
Smoking, eating and drinking should be prohibited in the application area.

ASHLAND®		Page: 4
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID		Version: 1.3
VV320		

For personal protection see section 8.

Conditions for safe storage : Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	REL	5 mg/m3 Mist.	NIOSH/GUID E
		STEL	10 mg/m3 Mist.	NIOSH/GUID E
		PEL	5 mg/m3 Mist.	OSHA_TRA NS

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

Respiratory protection : No personal respiratory protective equipment normally required.

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
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

ASHLAND®		Page: 5
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID		Version: 1.3
VV320		

Physical state : liquid

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : 662 °F / 350 °C
(1,013.333333 hPa)
Calculated Phase Transition Liquid/Gas

Flash point : > 390 °F / > 199 °C
Method: Cleveland open cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : 6 %(V)
GLP: Calculated Explosive Limit

Lower explosion limit : 1 %(V)
GLP: Calculated Explosive Limit

Vapour pressure : 0.1333333 hPa (20 °C)
Calculated Vapor Pressure

Relative vapour density : No data available

Relative density : No data available

Density : 0.849 g/cm3

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : 36 mm2/s (40 °C)

7 mm2/s (100 °C)

ASHLAND®		Page: 6
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID VV320		Version: 1.3

Oxidizing properties : 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 : excessive heat

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide
Hydrocarbons

SECTION 11. TOXICOLOGICAL INFORMATION

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

Acute toxicity

Not classified based on available information.

Components:

LUBRICATING OILS, PETROLEUM, C15-30, HYDROTREATED:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.58 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: Not classified as acutely toxic by inhalation under GHS.
Remarks: No mortality observed at this dose.

Acute dermal toxicity : LD 50 (Rabbit): > 5,000 mg/kg
Remarks: No mortality observed at this dose.

Skin corrosion/irritation

Not classified based on available information.

Product:

Result: Repeated exposure may cause skin dryness or cracking.

ASHLAND®		Page: 7
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID		Version: 1.3
VV320		

Components:

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

LUBRICATING OILS, PETROLEUM, C15-30, HYDROTREATED:

Species: Rabbit

Result: Not irritating to skin

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury.

Components:

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Mildly irritating to eyes

LUBRICATING OILS, PETROLEUM, C15-30, HYDROTREATED:

Species: Rabbit

Result: Not irritating to eyes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Components:

LUBRICATING OILS, PETROLEUM, C15-30, HYDROTREATED:

Test Type: Buehler Test

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Germ cell mutagenicity

Not classified based on available information.

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.

Components:

LUBRICATING OILS, PETROLEUM, C15-30, HYDROTREATED:

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.

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks: No data available

ASHLAND®		Page: 8
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID		Version: 1.3
VV320		

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

LUBRICATING OILS, PETROLEUM, C15-30, HYDROTREATED:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Test substance: WAF
Method: OECD Test Guideline 203
Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 10,000 mg/l
Exposure time: 48 h
Test Type: static test
Test substance: WAF
Method: OECD Test Guideline 202

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l
End point: Growth inhibition
Exposure time: 72 h
Test Type: static test
Test substance: WAF
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOELR (Oncorhynchus mykiss (rainbow trout)): Calculated >= 1,000 mg/l
Exposure time: 14 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEL (Daphnia (water flea)): 10 mg/l
Exposure time: 21 d
Test substance: WAF
Method: OECD Test Guideline 211

ASHLAND®		Page: 9
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID		Version: 1.3
VV320		

Persistence and degradability

LUBRICATING OILS, PETROLEUM, C15-30, HYDROTREATED:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 2 - 4 %
Exposure time: 28 d
Method: OECD Test Guideline 301B

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

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

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.

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

U.S. DOT - RAIL

Not dangerous goods

ASHLAND®		Page: 10
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID		Version: 1.3
VV320		

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TRANSPORT CANADA - ROAD

Not dangerous goods

TRANSPORT CANADA - RAIL

Not dangerous goods

TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

UN	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ALKYL PHOSPHITES, HETEROCYCLIC ETHER)	9	III	MARINE POLLUTANT:(HETEROCYCLIC ETHER)

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN	3082	Environmentally hazardous substance, liquid, n.o.s. (ALKYL PHOSPHITES, HETEROCYCLIC ETHER)	9	III	

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN	3082	Environmentally hazardous substance, liquid, n.o.s. (ALKYL PHOSPHITES, HETEROCYCLIC ETHER)	9	III	

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN	3082	SUSTANCIA LIQUIDA POTENCIALMENTE PELIGROSAS PARA EL MEDIO AMBIENTE, N.E.P. (ALKYL PHOSPHITES, HETEROCYCLIC ETHER)	9	III	

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

ASHLAND®		Page: 11
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID		Version: 1.3
VV320		

Marine pollutant	yes
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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

SARA 311/312 Hazards : No SARA Hazards

SARA 313 Component(s) : 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.

Pennsylvania Right To Know

HYDROTREATED HEAVY PARAFFINIC BASE OIL	64742-54-7	50.00 - 70.00 %
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	20.00 - 30.00 %
LUBRICANT ADDITIVE	Not Assigned	10.00 - 20.00 %

New Jersey Right To Know

HYDROTREATED HEAVY PARAFFINIC BASE OIL	64742-54-7	50.00 - 70.00 %
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	20.00 - 30.00 %
LUBRICANT ADDITIVE	Not Assigned	10.00 - 20.00 %
LUBRICATING OILS, PETROLEUM, C15-30, HYDROTREATED	72623-86-0	1.00 - 5.00 %

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

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

TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL.
AUSTR	: On the inventory, or in compliance with the inventory
ENCS	: On the inventory, or in compliance with the inventory
KECL	: On the inventory, or in compliance with the inventory

ASHLAND®		Page: 12
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID		Version: 1.3
VV320		

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

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

Inventories

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

SECTION 16. OTHER INFORMATION

Further information

Revision Date: 06/02/2015

NFPA:	HMIS III:						
<p>Flammability</p> <p>Health</p> <p>Instability</p> <p>Special hazard.</p>	<table border="1"> <tr> <td>HEALTH</td><td>1</td></tr> <tr> <td>FLAMMABILITY</td><td>1</td></tr> <tr> <td>PHYSICAL HAZARD</td><td>0</td></tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	HEALTH	1	FLAMMABILITY	1	PHYSICAL HAZARD	0
HEALTH	1						
FLAMMABILITY	1						
PHYSICAL HAZARD	0						

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

Full text of H-Statements referred to under sections 2 and 3.

H303 May be harmful if swallowed.
H304 May be fatal if swallowed and enters airways.

Further information

Sources of key data used to compile the Safety Data Sheet

Ashland 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

ASHLAND®		Page: 13
SAFETY DATA SHEET		Revision Date: 06/02/2015
		Print Date: 6/29/2015
		SDS Number: 000000207597
Valvoline™ MERCON® V AUTOMATIC TRANSMISSION FLUID		Version: 1.3
VV320		

information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

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

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