

		Page: 1
SAFETY DATA SHEET		Revision Date: 07/31/2016
		Print Date: 11/1/2016
		SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID VV348		Version: 1.1

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Valvoline™ DEX/MERC™
AUTOMATIC TRANSMISSION FLUID

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data sheet Valvoline LLC 3499 Blazer Parkway Lexington, KY 40509 United States of America SDS@valvoline.com	Emergency telephone number 1-800-VALVOLINE Regulatory Information Number 1-800-TEAMVAL Product Information 1-800-TEAMVAL
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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	Asp. Tox. 1; H304	11.82

		Page: 2
SAFETY DATA SHEET		Revision Date: 07/31/2016
		Print Date: 11/1/2016
		SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID VV348		Version: 1.1

MINERAL OIL		Not a hazardous substance or mixture.	5.00
METHACRYLATE COPOLYMER		Eye Irrit. 2A; H319	1.66
ALKOXYLATED LONG-CHAIN ALKYL AMINE		Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 3; H402 Aquatic Chronic 3; H412	0.40

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

		Page: 3
SAFETY DATA SHEET		Revision Date: 07/31/2016
		Print Date: 11/1/2016
		SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID VV348		Version: 1.1

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.

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 : Standard procedure for chemical fires.
- 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.

		Page: 4
SAFETY DATA SHEET		Revision Date: 07/31/2016
		Print Date: 11/1/2016
		SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID VV348		Version: 1.1

- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- 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 : Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
- Conditions for safe storage : 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
MINERAL OIL		REL	5 mg/m3 Mist.	NIOSH/GUID E
		STEL	10 mg/m3 Mist.	NIOSH/GUID E
		PEL	5 mg/m3 Mist.	OSHA_TRA NS
		TWA	5 mg/m3 Mist.	TN OEL
		TWA	5 mg/m3 Inhalable fraction.	ACGIH

- Engineering measures : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions

		Page: 5
SAFETY DATA SHEET		Revision Date: 07/31/2016
		Print Date: 11/1/2016
		SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID VV348		Version: 1.1

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

- Physical state : liquid
- Colour : red
- Odour : hydrocarbon-like
- Odour Threshold : No data available
- pH : No data available
: No data available
: No data available
- Flash point : > 390 °F / > 199 °C
Method: Cleveland open cup
- Evaporation rate : > 1
Ethyl Ether
- Flammability (solid, gas) : No data available
- Upper explosion limit : 6 %(V)
GLP: Calculated Explosive Limit
- Lower explosion limit : 1 %(V)

		Page: 6
SAFETY DATA SHEET		Revision Date: 07/31/2016
		Print Date: 11/1/2016
		SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID VV348		Version: 1.1

GLP: Calculated Explosive Limit

Vapour pressure	: 0.0133333 hPa (21.11 °C) Calculated Vapor Pressure
Relative vapour density	: No data available
Relative density	: 7.29 (15.6 °C)
Density	: 0.862 g/cm3 (15.56 °C)
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	: ca. 43 mm2/s (40 °C)
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

		Page: 7
SAFETY DATA SHEET		Revision Date: 07/31/2016
		Print Date: 11/1/2016
		SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID VV348		Version: 1.1

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:

ALKOXYLATED LONG-CHAIN ALKYL AMINE:

Acute oral toxicity : Assessment: The component/mixture is classified as acute oral toxicity, category 4.

Skin corrosion/irritation

Not classified based on available information.

Product:

Result: Repeated exposure may cause skin dryness or cracking.

Components:

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

MINERAL OIL:

Result: Mildly irritating to skin

METHACRYLATE COPOLYMER:

Result: Not irritating to skin

ALKOXYLATED LONG-CHAIN ALKYL AMINE:

Result: Corrosive 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

MINERAL OIL:

Result: Mildly irritating to eyes

METHACRYLATE COPOLYMER:

Result: Irritating to eyes

ALKOXYLATED LONG-CHAIN ALKYL AMINE:

Result: Corrosive to eyes

	Page: 8
SAFETY DATA SHEET	Revision Date: 07/31/2016
	Print Date: 11/1/2016
	SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID VV348	Version: 1.1

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Product:

Assessment: Does not cause skin sensitisation.

Components:

ALKOXYLATED LONG-CHAIN ALKYL AMINE:

Assessment: May cause sensitization by skin contact.

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.

Product:

No aspiration toxicity classification

Components:

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

May be fatal if swallowed and enters airways.

Further information

Product:

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.

		Page: 9
SAFETY DATA SHEET		Revision Date: 07/31/2016
		Print Date: 11/1/2016
		SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID VV348		Version: 1.1

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

ALKOXYLATED LONG-CHAIN ALKYL AMINE:

Ecotoxicology Assessment

Acute aquatic toxicity : Harmful to aquatic life.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

Product:

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

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

Contaminated packaging : Empty remaining contents.

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

		Page: 10
SAFETY DATA SHEET		Revision Date: 07/31/2016
		Print Date: 11/1/2016
		SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID		Version: 1.1
VV348		

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

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
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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

	Page: 11
SAFETY DATA SHEET	Revision Date: 07/31/2016
	Print Date: 11/1/2016
	SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID VV348	Version: 1.1

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.
Component(s)SARA 313

Pennsylvania Right To Know

HEAVY PARAFFINIC DISTILLATE	64742-54-7	90.00 - 100.00 %
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	10.00 - 20.00 %
MINERAL OIL	Not Assigned	5.00 - 10.00 %
AUTOMATIC TRANSMISSION FLUID ADDITIVE	Not Assigned	1.00 - 5.00 %

New Jersey Right To Know

HEAVY PARAFFINIC DISTILLATE	64742-54-7	90.00 - 100.00 %
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	10.00 - 20.00 %
MINERAL OIL	Not Assigned	5.00 - 10.00 %
AUTOMATIC TRANSMISSION FLUID ADDITIVE	Not Assigned	1.00 - 5.00 %
METHACRYLATE COPOLYMER	Not Assigned	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
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory

Inventories

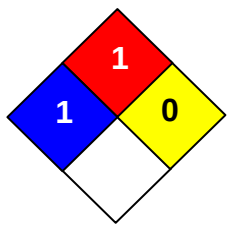
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

	Page: 12
SAFETY DATA SHEET	Revision Date: 07/31/2016
	Print Date: 11/1/2016
	SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID VV348	Version: 1.1

SECTION 16. OTHER INFORMATION

Further information

Revision Date: 07/31/2016

NFPA:	HMIS III:						
Flammability Health  Instability Special hazard.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: blue; color: white; text-align: center;">HEALTH</td><td style="text-align: center;">1</td></tr> <tr> <td style="background-color: red; color: white; text-align: center;">FLAMMABILITY</td><td style="text-align: center;">1</td></tr> <tr> <td style="background-color: yellow; text-align: center;">PHYSICAL HAZARD</td><td style="text-align: center;">0</td></tr> </table> 0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic	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.

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

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 (1-800-825-8654).

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

		Page: 13
SAFETY DATA SHEET		Revision Date: 07/31/2016
		Print Date: 11/1/2016
		SDS Number: R0200299
Valvoline™ DEX/MERC™ AUTOMATIC TRANSMISSION FLUID VV348		Version: 1.1

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