| Valvoline. | Page: 1 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 07/31/2016 |
| | Print Date: 10/30/2018 |
| | SDS Number: R0257849 |
| Valvoline™ Quality R&O Hydraulic Fluid ™ Trademark, Valvoline or its subsidiaries, registered in various countries VV700 | Version: 1.1 |

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Valvoline™ Quality R&O Hydraulic Fluid

™ Trademark, Valvoline or its subsidiaries, registered in

various countries

Recommended use of the chemical and restrictions on use

| Details of the supplier of the safety data sheet | Emergency telephone number 1-800-VALVOLINE |
|---|--|
| Valvoline LLC 3499 Blazer Parkway Lexington, KY 40509 | Regulatory Information Number 1-800-TEAMVAL |
| United States of America | Product Information 1-800-TEAMVAL |
| SDS@valvoline.com | 1 000 TEAWIVAE |

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 (%) |
|--------------------------|---------|-----------------------|-------------------|
| SEVERELY HYDROTREATED | | Not a hazardous | 100.00 |
| NAPHTHENIC MINERAL OIL - | | substance or mixture. | |

| Valvoline | Page: 2 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 07/31/2016 |
| | Print Date: 10/30/2018 |
| | SDS Number: R0257849 |
| Valvoline™ Quality R&O Hydraulic Fluid ™ Trademark, Valvoline or its subsidiaries, | Version: 1.1 |
| registered in various countries | |
| VV700 | |

| MIXTURE | | |
|----------------------------------|---------------------------------------|------|
| PARAFFINIC BASE OIL - MIXTURE | Not a hazardous substance or mixture. | 9.99 |

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.

| Valvoline. | Page: 3 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 07/31/2016 |
| | Print Date: 10/30/2018 |
| | SDS Number: R0257849 |
| Valvoline™ Quality R&O Hydraulic Fluid ™ Trademark, Valvoline or its subsidiaries, registered in various countries VV700 | Version: 1.1 |

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

: 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

: carbon dioxide and carbon monoxide

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.

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.

| Valvoline. | Page: 4 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 07/31/2016 |
| | Print Date: 10/30/2018 |
| | SDS Number: R0257849 |
| Valvoline™ Quality R&O Hydraulic Fluid ™ Trademark, Valvoline or its subsidiaries, registered in various countries VV700 | Version: 1.1 |

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 |
|--|---------|-------------------------------------|--|-----------------|
| SEVERELY HYDROTREATED NAPHTHENIC MINERAL OIL - MIXTURE | | 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 |
| PARAFFINIC BASE OIL - MIXTURE | | 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 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.

| Valvoline | Page: 5 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 07/31/2016 |
| | Print Date: 10/30/2018 |
| | SDS Number: R0257849 |
| Valvoline™ Quality R&O Hydraulic Fluid ™ Trademark, Valvoline or its subsidiaries, registered in various countries VV700 | Version: 1.1 |

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

Odour : hydrocarbon-like

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Flash point : 370 °F / 188 °C

Method: Cleveland open cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : 0.9150 g/cm3 (15.6 °C)

Solubility(ies)

Water solubility : negligible

Solubility in other solvents : No data available

| Valvoline. | Page: 6 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 07/31/2016 |
| | Print Date: 10/30/2018 |
| | SDS Number: R0257849 |
| Valvoline™ Quality R&O Hydraulic Fluid ™ Trademark, Valvoline or its subsidiaries, registered in various countries VV700 | Version: 1.1 |

Partition coefficient: n-

octanol/water

: No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : 47 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.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition

products No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation

exposure Skin contact

Eye Contact Ingestion

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Product:

Result: Repeated exposure may cause skin dryness or cracking.

Components:

SEVERELY HYDROTREATED NAPHTHENIC MINERAL OIL - MIXTURE:

Result: Mildly irritating to skin

PARAFFINIC BASE OIL - MIXTURE:

| Valvoline | Page: 7 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 07/31/2016 |
| | Print Date: 10/30/2018 |
| | SDS Number: R0257849 |
| Valvoline™ Quality R&O Hydraulic Fluid ™ Trademark, Valvoline or its subsidiaries, registered in various countries VV700 | Version: 1.1 |

Result: Mildly irritating to skin

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury.

Components:

SEVERELY HYDROTREATED NAPHTHENIC MINERAL OIL - MIXTURE:

Result: Mildly irritating to eyes

PARAFFINIC BASE OIL - MIXTURE:

Result: Mildly irritating to eyes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

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.

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.

| Valvoline. | Page: 8 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 07/31/2016 |
| | Print Date: 10/30/2018 |
| | SDS Number: R0257849 |
| Valvoline™ Quality R&O Hydraulic Fluid ™ Trademark, Valvoline or its subsidiaries, registered in various countries VV700 | Version: 1.1 |

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

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

| 112002/111011 | | | | | |
|---------------|----------------------|---------|------------|---------|-------------|
| ID NUMBER | PROPER SHIPPING NAME | *HAZARD | SUBSIDIARY | PACKING | MARINE |
| | | CLASS | HAZARDS | GROUP | POLLUTANT / |
| | | | | | LTD. QTY. |

U.S. DOT - ROAD

| Not dangerous goods | |
|---------------------|--|
| | |

CFR_RAIL_C

| <u> </u> | | |
|----------|---------------------|--|
| | Not dangerous goods | |
| | | |

U.S. DOT - INLAND WATERWAYS

| Not dangerous goods | | |
|---------------------|----------|---|
| Not dangerous goods | | |
| | | |
| <u>-</u> | <u> </u> | • |

| Valvoline. | Page: 9 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 07/31/2016 |
| | Print Date: 10/30/2018 |
| | SDS Number: R0257849 |
| Valvoline™ Quality R&O Hydraulic Fluid ™ Trademark, Valvoline or its subsidiaries, registered in various countries VV700 | Version: 1.1 |

| TDG_ROAD_C | |
|---------------|---|
| IDO_NOAD_C | Not dangerous goods |
| | Not dangerous goods |
| | |
| TDG_RAIL_C | |
| | Not dangerous goods |
| | |
| TDG_INWT_C | |
| | Not dangerous goods |
| | |
| INTERNATIONAL | Not dangerous goods |
| INTERNATIONAL | L AIR TRANSPORT ASSOCIATION - CARGO |
| | Not dangerous goods |
| | |
| INTERNATIONAL | L 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

SARA 311/312 Hazards : No SARA Hazards

SARA 313

: This material does not contain any chemical components with Component(s)SARA 313 known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Pennsylvania Right To Know

| Valvoline. | Page: 10 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 07/31/2016 |
| | Print Date: 10/30/2018 |
| | SDS Number: R0257849 |
| Valvoline™ Quality R&O Hydraulic Fluid ™ Trademark, Valvoline or its subsidiaries, registered in various countries VV700 | Version: 1.1 |

SEVERELY HYDROTREATED Not Assigned 90.00 - NAPHTHENIC MINERAL OIL - MIXTURE 100.00 %

PARAFFINIC BASE OIL - MIXTURE Not Assigned 5.00 - 10.00 %

New Jersey Right To Know

SEVERELY HYDROTREATED Not Assigned 90.00 - NAPHTHENIC MINERAL OIL - MIXTURE 100.00 %

PARAFFINIC BASE OIL - MIXTURE Not Assigned 5.00 - 10.00 %

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.

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

TSCA : On TSCA Inventory

DSL : Not in compliance with the inventory

AUSTR : Not in compliance with the inventory

NZIOC : Not in compliance with the inventory

ENCS : Not in compliance with the inventory

KECL : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

Inventories

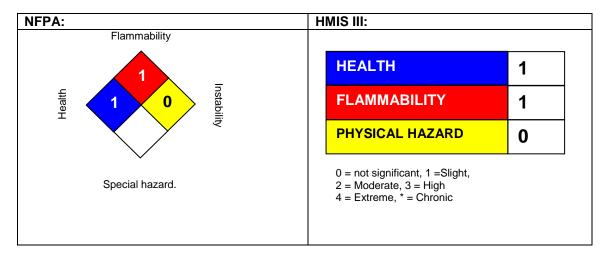
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

| Valvoline. | Page: 11 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 07/31/2016 |
| | Print Date: 10/30/2018 |
| | SDS Number: R0257849 |
| Valvoline™ Quality R&O Hydraulic Fluid ™ Trademark, Valvoline or its subsidiaries, registered in various countries VV700 | Version: 1.1 |

SECTION 16. OTHER INFORMATION

Further information

Revision Date: 07/31/2016



NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

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

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:

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.

| Valvoline. | Page: 12 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 07/31/2016 |
| | Print Date: 10/30/2018 |
| | SDS Number: R0257849 |
| Valvoline™ Quality R&O Hydraulic Fluid ™ Trademark, Valvoline or its subsidiaries, registered in various countries VV700 | Version: 1.1 |

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

DMDA - Haalth Canada Daat Managanant Dagulatan Asaas

PMRA: Health Canada Pest Management Regulatory Agency

RTK: Right to Know

WHMIS: Workplace Hazardous Materials Information System