

NITEO PRODUCTS		Page: 1
SAFETY DATA SHEET		Revision Date: 11/17/2015
		Print Date: 12/10/2015
		SDS Number: 000000264507
Valvoline™ POWER STEERING FLUID 602241		Version: 1.0

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Trade name : Valvoline™
POWER STEERING FLUID

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data sheet Niteo Products, LLC P.O. Box 191629 Dallas TX 75219 United States of America	Emergency telephone number CHEMTREC DIRECT 1-800-424-9300 Product Information 1-844-696-4836
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SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Reproductive toxicity : Category 2

GHS Label element


Hazard pictograms :



Signal Word : Warning

Hazard Statements : Suspected of damaging fertility or the unborn child.

Precautionary Statements : **Prevention:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
IF exposed or concerned: Get medical advice/ attention.
Storage:
Store locked up.
Disposal:
Dispose of contents/ container to an approved waste disposal plant.

		Page: 2
SAFETY DATA SHEET		Revision Date: 11/17/2015
		Print Date: 12/10/2015
		SDS Number: 000000264507
Valvoline™ POWER STEERING FLUID		Version: 1.0
602241		

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS


Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	Asp. Tox. 1; H304	12.41
TRICRESYL PHOSPHATE	1330-78-5	Acute Tox. 4; H332 Repr. 2; H361	0.21

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Call a POISON CENTRE or doctor/physician if exposed or you feel unwell.
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 : 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 : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
If eye irritation persists, consult a specialist.
- If swallowed : Obtain medical attention.
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 : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who

		Page: 3
SAFETY DATA SHEET		Revision Date: 11/17/2015
		Print Date: 12/10/2015
		SDS Number: 000000264507
Valvoline™ POWER STEERING FLUID		Version: 1.0
602241		

delayed

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)
 Suspected of damaging fertility or the unborn child.

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

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.

SAFETY DATA SHEET

Revision Date: 11/17/2015

Print Date: 12/10/2015

SDS Number: 000000264507

 Valvoline™ POWER STEERING FLUID
602241

Version: 1.0

SECTION 6. ACCIDENTAL RELEASE MEASURES


- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.
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 : Do not breathe vapours/dust.
Do not smoke.
Container hazardous when empty.
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.
Observe label precautions.

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			ACGIH
				ACGIHLIS_P
				ACGIHLIS_P
		REL	5 mg/m3 Mist.	NIOSH/GUID E

		Page: 5
SAFETY DATA SHEET		Revision Date: 11/17/2015
		Print Date: 12/10/2015
		SDS Number: 000000264507
Valvoline™ POWER STEERING FLUID		Version: 1.0
602241		

		STEL	10 mg/m3 Mist.	NIOSH/GUID E
		PEL	5 mg/m3 Mist.	OSHA_TRAN S

Hazardous components without workplace control parameters

Components	CAS-No.
TRICRESYL PHOSPHATE	1330-78-5

Engineering measures : 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 : A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

Hand protection
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

: Wear as appropriate:
Impervious clothing
Safety shoes
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures

: Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Odour : No data available

SAFETY DATA SHEET

Revision Date: 11/17/2015

Print Date: 12/10/2015

SDS Number: 000000264507

Valvoline™ POWER STEERING FLUID

Version: 1.0

602241

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 : > 390 °F / > 199 °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 : 1.33 hPa Calculated Vapor Pressure
 Relative vapour density : No data available
 Relative density : No data available
 Density : No data available
 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 : 42 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.

SAFETY DATA SHEET

Revision Date: 11/17/2015

Print Date: 12/10/2015

SDS Number: 000000264507

Valvoline™ POWER STEERING FLUID

Version: 1.0

602241

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:

TRICRESYL PHOSPHATE:

Acute oral toxicity : LD50 (Rat, male and female): > 20,000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 11.1 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist
Assessment: The component/mixture is classified as acute inhalation toxicity, category 5.
Remarks: No mortality observed at this dose.

Acute dermal toxicity : LD50 (Rabbit, male and female): 3,700 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

TRICRESYL PHOSPHATE:

Species: Rabbit

Exposure time: 4 h

Result: Slightly 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:

		Page: 8
SAFETY DATA SHEET		Revision Date: 11/17/2015
		Print Date: 12/10/2015
		SDS Number: 000000264507
Valvoline™ POWER STEERING FLUID		Version: 1.0
602241		

Result: Mildly irritating to eyes

TRICRESYL PHOSPHATE:

Species: Rabbit

Result: No eye irritation

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Components:

TRICRESYL PHOSPHATE:

Test Type: Local lymph node assay

Exposure routes: Dermal

Species: Mouse

Assessment: Does not cause skin sensitisation.

Method: OECD Test Guideline 429

GLP: yes

Germ cell mutagenicity

Not classified based on available information.

Components:

TRICRESYL PHOSPHATE:

- Genotoxicity in vitro :
- Test Type: Chromosome aberration test in vitro
 - Test species: Chinese hamster lung cells
 - Metabolic activation: with and without metabolic activation
 - Method: OECD Test Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
 - Result: negative
 - GLP: yes
- :
- Test Type: Ames test
 - Test species: Salmonella typhimurium
 - Metabolic activation: with and without metabolic activation
 - Method: OECD Test Guideline 471
 - Result: negative
 - GLP: no

Carcinogenicity

Not classified based on available information.


Reproductive toxicity

Suspected of damaging fertility or the unborn child.

Components:

TRICRESYL PHOSPHATE:

- Effects on fertility :
- Test Type: Fertility/early embryonic development
 - Species: Rat, male and female
 - Application Route: Oral
- :
- Test Type: Two-generation study
 - Species: Mouse, male and female
 - Application Route: Oral
- Effects on foetal development :
- Test Type: Embryo-foetal development
 - Species: Rat, male and female

		Page: 9
SAFETY DATA SHEET		Revision Date: 11/17/2015
		Print Date: 12/10/2015
		SDS Number: 000000264507
Valvoline™ POWER STEERING FLUID		Version: 1.0
602241		

Application Route: Oral
Method: OPPTS 870.3700
Result: Teratogenic potential
GLP: yes

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, based on animal experiments.

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:

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.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

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.

TRICRESYL PHOSPHATE:

Toxicity to fish : LC50 (Rainbow darter (Etheostoma caeruleum)): 0.6 mg/l
Exposure time: 96 h
Test Type: static test

SAFETY DATA SHEET

Revision Date: 11/17/2015

Print Date: 12/10/2015

SDS Number: 000000264507

Valvoline™ POWER STEERING FLUID

Version: 1.0

602241

Toxicity to daphnia and other aquatic invertebrates : (Daphnia magna (Water flea)): 0.146 mg/l
 Test Type: Immobilization
 Method: OECD Test Guideline 202
 GLP: yes

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (microalgae)): > 2.5 mg/l
 Exposure time: 72 h
 Test Type: Growth inhibition
 Method: OECD Test Guideline 201
 GLP: yes

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : (Oncorhynchus mykiss (rainbow trout)): 0.9 mg/l
 Exposure time: 28 d

Toxicity to bacteria : EC 50 (activated sludge): > 1,000 mg/l
 Exposure time: 3 h
 Test Type: Respiration inhibition
 Method: OECD Test Guideline 209
 GLP: yes

Ecotoxicology Assessment
 Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Persistence and degradability

TRICRESYL PHOSPHATE:

Biodegradability : Result: Readily biodegradable
 Biodegradation: 80 %
 Exposure time: 28 d
 Method: OECD Test Guideline 301C
 GLP: yes

Bioaccumulative potential

TRICRESYL PHOSPHATE:

Bioaccumulation : Species: Fathead minnow (Pimephales promelas)
 Bioconcentration factor (BCF): 165
 Exposure time: 32 d
 Concentration: 0.0316 mg/l
 Method: Flow through

Partition coefficient: n-octanol/water : log Pow: 5.93

Mobility in soil

No data available

SAFETY DATA SHEET

Revision Date: 11/17/2015

Print Date: 12/10/2015

SDS Number: 000000264507

Valvoline™ POWER STEERING FLUID
602241

Version: 1.0

Other adverse effects

No data available

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

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.

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods



SAFETY DATA SHEET

Revision Date: 11/17/2015

Print Date: 12/10/2015

SDS Number: 000000264507

Valvoline™ POWER STEERING FLUID
602241

Version: 1.0

TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

TRANSPORT CANADA - RAIL

Not dangerous goods

TRANSPORT CANADA - ROAD

Not dangerous goods
MARINE POLLUTANT:(TRICRESYL PHOSPHATE, TRI-ORTHO-CRESYL PHOSPHATE)

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

U.S. DOT - RAIL

Not dangerous goods

U.S. DOT - ROAD

Not dangerous goods

***ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**


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 : Chronic Health Hazard

SARA 313 Component(s)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.

		Page: 13
SAFETY DATA SHEET		Revision Date: 11/17/2015
		Print Date: 12/10/2015
		SDS Number: 000000264507
Valvoline™ POWER STEERING FLUID		Version: 1.0
602241		

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
- 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

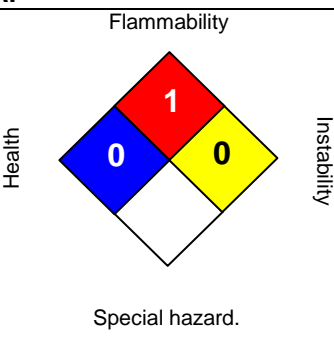
Inventories

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

Revision Date: 11/17/2015


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

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

Full text of H-Statements

- H304 May be fatal if swallowed and enters airways.
- H332 Harmful if inhaled.
- H361 Suspected of damaging fertility or the unborn child.

		Page: 14
SAFETY DATA SHEET		Revision Date: 11/17/2015
		Print Date: 12/10/2015
		SDS Number: 000000264507
Valvoline™ POWER STEERING FLUID		Version: 1.0
602241		

Sources of key data used to compile the Safety Data Sheet

Internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

Cefic, the European Chemical Industry Council.

ESIS European Chemical Substances Information System

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 Niteo's Environmental Health and Safety Department (1-844-696-4836).

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

	Page: 15
SAFETY DATA SHEET	Revision Date: 11/17/2015
	Print Date: 12/10/2015
	SDS Number: 000000264507
Valvoline™ POWER STEERING FLUID 602241	Version: 1.0

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