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29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

:

Product identifier

Trade name

Valvoline[™] POWER STEERING FLUID [™] Trademark, Valvoline or its subsidiaries, regisred in various countries

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

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

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Reproductive toxicity	: Category 2
GHS label elements 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.

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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	12.4183
TRICRESYL PHOSPHATE	1330-78-5	Acute Tox. 4; H332 Repr. 2; H361	0.2185

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

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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.

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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	NIOSH/GUID

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	Mist.	E
STEL	10 mg/m3 Mist.	NIOSH/GUID E
PEL	5 mg/m3 Mist.	OSHA_TRA NS

Hazardous components without workplace control parameters

Engineering measures	ventila applic	de sufficient mechanical (general and/or local exhaust) ation to maintain exposure below exposure guidelines (if able) or below levels that cause known, suspected or ent adverse effects.
Personal protective equipment		
Respiratory protection :	cartric circur excee other purify suppl releas circur	OSH-approved air-purifying respirator with an appropriate dge and/or filter may be permissible under certain instances where airborne concentrations are expected to ed exposure limits (if applicable) or if overexposure has wise been determined. Protection provided by air- ing respirators is limited. Use a positive pressure, air- ied respirator if there is any potential for uncontrolled se, exposure levels are not known or any other instances where an air-purifying respirator may not be adequate protection.
Hand protection Remarks :		uitability for a specific workplace should be discussed he producers of the protective gloves.
Eye protection :		equired under normal conditions of use. Wear splash- safety goggles if material could be misted or splashed yes.
Skin and body protection :	Impe Safet Choo conce	as appropriate: rvious clothing y shoes se body protection according to the amount and entration of the dangerous substance at the work place. resistant gloves (consult your safety equipment ier).
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
Odour Threshold	:	No data available

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рН	: 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 hPaCalculated 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.
Possibility of hazardous reactions	: Product will not undergo hazardous polymerization.

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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 availab <u>Components:</u> 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. <u>Components:</u> 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. <u>Product:</u> Remarks: Unlikely to cause eye irritation or injury.		
<u>Components:</u> HYDROTREATED LIGHT PAP Result: Mildly irritating to eves	AFFINIC DISTILLATE:	

Result: Mildly irritating to eyes

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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. <u>Components:</u> 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. <u>Components:</u> 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: Test Type: Embryo-foetal developmentdevelopmentSpecies: Rat, male and female

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> 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 <u>Product:</u> 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 <u>Product:</u> 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.
<u>Components:</u> TRICRESYL PHOSPHATE: Toxicity to fish	: LC50 (Rainbow darter (Etheostoma caeruleum)): 0.6 mg/l Exposure time: 96 h Test Type: static test

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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)): > 2.8 mg/l Exposure time: 72 h Test Type: Growth inhibition Method: OECD Test Guideline 201 GLP: yes 	5
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 degradabili TRICRESYL PHOSPHATE: Biodegradability	: Result: Readily biodegradable Biodegradation: 80 % Exposure time: 28 d Method: OECD Test Guideline 301C GLP: yes	
No data available 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	
No data available Mobility in soil No data available		

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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

RECOLATION					
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

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TDG_ROAD_C

Not dangerous goods

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TDG_RAIL_C

Not dangerous goods

TDG_INWT_C

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

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

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

yes

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.
California Prop 65	Proposition 65 warnings are not required for this product

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based on the results of a risk assessment. The components of this product are reported in the following inventories: : On TSCA Inventory TSCA 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

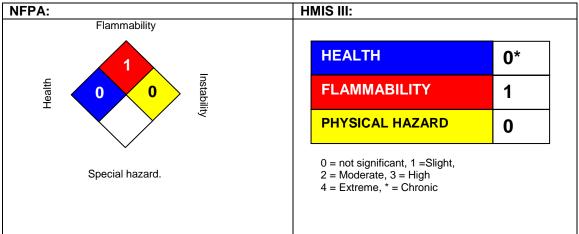
Inventories

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

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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.

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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 harmon

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

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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