SAFETY DATA SHEET

Valvoline Professional Series COMPLETE FUEL SYSTEM CLEANER FUEL SYSTEM CLEANER

Version: 1.1 | Revision Date: 02/18/2022 | Print Date: 09/21/2022

GHS classification in accordance with the Hazardous Products Regulations

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Valvoline Professional Series COMPLETE FUEL SYSTEM CLEANER
FUEL SYSTEM CLEANER

Product code : 717631

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

Recommended use : Industrial chemical

Details of the supplier of the safety data sheet	**Emergency telephone number**
Valvoline Canada Corp 905 Winston Churchill Blvd Mississauga ON L5J 4P2 Canada 1-800-TEAMVAL (1-800-832-6825) SDS@valvoline.com	1-800-VALVOLINE (1-800-825-8654) **Regulatory Information Number** 1-800-TEAMVAL (1-800-832-6825) **Product Information** 1-800-TEAMVAL (1-800-832-6825)

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids	:	Category 3
Acute toxicity (Oral)	:	Category 4
Skin irritation	:	Category 2
Eye irritation	:	Category 2A
Carcinogenicity (Inhalation)	:	Category 2
Aspiration hazard	:	Category 1
Physical hazards not otherwise classified	:	Category 1

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : H226 Flammable liquid and vapour.
May become electrostatically charged. Sparks may ignite liquid and vapor.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer if inhaled.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P331 Do NOT induce vomiting.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

Chemical nature : Static Accumulator

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (%)
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics		Flam. Liq. 4; H227 Asp. Tox. 1; H304	>=30.00 - < 60.00
POLY[OXY(1,2-PROPANEDIYL)], ALPHA,-(3-AMINOPROPYL)-,OMEGA.-HYDROXY-,C12-C15 ALKYL ETHERS		Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318	>=30.00 - < 32.00
Distillates (petroleum), hydrotreated middle	64742-46-7	Flam. Liq. 3; H226 Acute Tox. 4; H332 Skin Irrit. 2; H315 Asp. Tox. 1; H304	>=10.00 - < 30.00
NAPHTHA (PETROLEUM), HYDROTREATED HEAVY	64742-48-9	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 STOT SE 3; H335	>=10.00 - < 30.00

		Asp. Tox. 1; H304 PHNOC 1;	
Poly[oxy(1,2-propanediyl)].alpha.-propyl-.omega.-hydroxy-C12-15 alkyl ethers		Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318	>=1.00 - < 5.00
HYDROCARBONS, C10, AROMATICS, >1% NAPHTHALENE	64742-94-5	Flam. Liq. 4; H227 STOT SE 3; H336 Asp. Tox. 1; H304	>=1.00 - < 5.00
NAPHTHALENE	91-20-3	Acute Tox. 4; H302 Carc. 2; H351	>=0.10 - < 1.00

Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed	:	Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer if inhaled. No symptoms known or expected.
Notes to physician	:	No hazards which require special first aid measures. Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Alcohol-resistant 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
Specific extinguishing methods	:	
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions,	:	Use personal protective equipment.

protective equipment and emergency procedures		Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
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	:	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	:	No smoking. 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. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible	Basis

			concentration	
NAPHTHA (PETROLEUM), HYDROTREATED HEAVY	64742-48-9	TWA	100 ppm	SUPLR EXP
NAPHTHALENE	91-20-3	TWA	10 ppm 52 mg/m3	CA AB OEL
		STEL	15 ppm 79 mg/m3	CA AB OEL
		TWA	10 ppm	CA BC OEL
		TWAEV	10 ppm	CA QC OEL

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : 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 : 185 °C
Calculated Phase Transition Liquid/Gas

Flash point : 42.2 °C

		Calculated Flash Point
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Flammability (liquids)	:	Static-accumulating flammable liquid.
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	1.131 hPa Calculated Vapor Pressure
Relative vapour density	:	No data available
Relative density	:	No data available
Density	:	0.870 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	No data available
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Oxidizing properties	:	No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed.

Vapours may form explosive mixture with air.

Conditions to avoid	:	excessive heat
Incompatible materials	:	fluorides Nitric acid perchloric acid Strong oxidizing agents
Hazardous decomposition products		No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Harmful if swallowed.
Product:

Acute oral toxicity	:	Acute toxicity estimate: 1,510 mg/kg Method: Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: > 20 mg/l Exposure time: 4 h Test atmosphere: vapour Method: Calculation method

Components:
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute dermal toxicity	:	LD50 (Rabbit): > 5,000 mg/kg

POLY[OXY(1,2-PROPANEDIYL)], ALPHA,-(3-AMINOPROPYL)-,OMEGA.-HYDROXY-,C12-C15 ALKYL ETHERS:

Acute oral toxicity	:	Assessment: The component/mixture is moderately toxic after single ingestion.

Distillates (petroleum), hydrotreated middle:

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50: estimated 11 mg/l Exposure time: 4 h Test atmosphere: vapour

Poly[oxy(1,2-propanediyl)].alpha.-propyl-.omega.-hydroxy-C12-15 alkyl ethers:

Acute oral toxicity	:	Assessment: The component/mixture is moderately toxic after single ingestion.

NAPHTHALENE:

Acute oral toxicity	:	LD50 (Mouse, male): 533 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	LC50 (Rat): > 0.4 mg/l Exposure time: 4 h Test atmosphere: vapour Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 (Rabbit): > 2.0 g/kg LD50 (Rat, male and female): > 2,500 mg/kg Assessment: The substance or mixture has no acute dermal toxicity
Acute toxicity (other routes of administration)	:	LD50 (Mouse, female): 710 mg/kg Application Route: oral (gavage) LD50 (Mouse): 150 mg/kg Application Route: Intraperitoneal LD50 (Mouse, male): 533 mg/kg Application Route: oral (gavage)

Skin corrosion/irritation
Causes skin irritation.
Product:

Result	:	Repeated exposure may cause skin dryness or cracking.
Remarks	:	May cause skin irritation in susceptible persons.

Components:
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Result	:	No skin irritation

POLY[OXY(1,2-PROPANEDIYL)], ALPHA,-(3-AMINOPROPYL)-,OMEGA.-HYDROXY-,C12-C15 ALKYL ETHERS:

Result	:	Irritating to skin.

Distillates (petroleum), hydrotreated middle:

Result	:	Irritating to skin.

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY:

Assessment	:	Irritating to skin.
Result	:	Irritating to skin.

Poly[oxy(1,2-propanediyl)].alpha.-propyl-.omega.-hydroxy-C12-15 alkyl ethers:

Result	:	Irritating to skin.

HYDROCARBONS, C10, AROMATICS, >1% NAPHTHALENE:

Result	:	Slight, transient irritation

NAPHTHALENE:
Result : Slight, transient irritation

Serious eye damage/eye irritation
Causes serious eye irritation.
Product:
Result : Irritating to eyes.
Remarks : Expected based on components.

Remarks : May cause irreversible eye damage.

Components:
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics:
Result : Slight, transient irritation

POLY[OXY(1,2-PROPANEDIYL)], ALPHA,-(3-AMINOPROPYL)-,OMEGA.-HYDROXY-,C12-C15 ALKYL ETHERS:
Result : Risk of serious damage to eyes.

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY:
Result : Irritating to eyes.
Assessment : Irritating to eyes.

Poly[oxy(1,2-propanediyl)].alpha.-propyl-.omega.-hydroxy-C12-15 alkyl ethers:
Result : Risk of serious damage to eyes.

HYDROCARBONS, C10, AROMATICS, >1% NAPHTHALENE:
Result : Slight, transient irritation

NAPHTHALENE:
Result : Slight, transient irritation

Respiratory or skin sensitisation
Skin sensitisation
Not classified based on available information.
Respiratory sensitisation
Not classified based on available information.
Components:
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics:
Assessment : Did not cause sensitisation on laboratory animals.
Method : OECD Test Guideline 406

POLY[OXY(1,2-PROPANEDIYL)], ALPHA,-(3-AMINOPROPYL)-,OMEGA.-HYDROXY-,C12-C15 ALKYL ETHERS:
Assessment : Does not cause skin sensitisation.

Poly[oxy(1,2-propanediyl)].alpha.-propyl-.omega.-hydroxy-C12-15 alkyl ethers:
Assessment : Does not cause skin sensitisation.

Germ cell mutagenicity
Not classified based on available information.
Carcinogenicity
Suspected of causing cancer if inhaled.
Components:
NAPHTHALENE:
Carcinogenicity - Assessment : Limited evidence of carcinogenicity in inhalation studies with animals.

Reproductive toxicity
Not classified based on available information.
STOT - single exposure
Not classified based on available information.
Components:
NAPHTHA (PETROLEUM), HYDROTREATED HEAVY:
Assessment : May cause respiratory irritation.

HYDROCARBONS, C10, AROMATICS, >1% NAPHTHALENE:
Assessment : The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

STOT - repeated exposure
Not classified based on available information.
Aspiration toxicity
May be fatal if swallowed and enters airways.

Components:
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics:
May be fatal if swallowed and enters airways.

Distillates (petroleum), hydrotreated middle:
May be fatal if swallowed and enters airways.

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY:
May be fatal if swallowed and enters airways.

HYDROCARBONS, C10, AROMATICS, >1% NAPHTHALENE:
May be fatal if swallowed and enters airways.

Further information
Product:
Remarks : Solvents may degrease the skin.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
Product:
Ecotoxicology Assessment
Short-term (acute) aquatic hazard : Acute aquatic toxicity Category 1; Very toxic to aquatic life.

Long-term (chronic) aquatic hazard	:	Chronic aquatic toxicity Category 1; Very toxic to aquatic life with long lasting effects.

Components:

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics:

Toxicity to fish	:	LL50 (Oncorhynchus mykiss (rainbow trout)): > 1,000 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EL50 (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 48 h
Toxicity to algae	:	EL50 (Pseudokirchneriella subcapitata (green algae)): > 1,000 mg/l Exposure time: 72 h

POLY[OXY(1,2-PROPANEDIYL)], ALPHA,-(3-AMINOPROPYL)-,OMEGA.-HYDROXY-,C12-C15 ALKYL ETHERS:

Ecotoxicology Assessment

Short-term (acute) aquatic hazard	:	Very toxic to aquatic life.
Long-term (chronic) aquatic hazard	:	Very toxic to aquatic life with long lasting effects.

Distillates (petroleum), hydrotreated middle:

Ecotoxicology Assessment

Long-term (chronic) aquatic hazard	:	Toxic to aquatic life with long lasting effects.

Poly[oxy(1,2-propanediyl)].alpha.-propyl-.omega.-hydroxy-C12-15 alkyl ethers:

Ecotoxicology Assessment

Short-term (acute) aquatic hazard	:	Very toxic to aquatic life. Acute aquatic toxicity Category 1; Very toxic to aquatic life.
Long-term (chronic) aquatic hazard	:	Very toxic to aquatic life with long lasting effects. Chronic aquatic toxicity Category 1; Very toxic to aquatic life with long lasting effects.

HYDROCARBONS, C10, AROMATICS, >1% NAPHTHALENE:

Toxicity to fish	:	LL50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l Exposure time: 96 h Test Type: semi-static test Test substance: WAF Method: OECD Test Guideline 203 Remarks: The toxicological data has been taken from products of similar composition.

Toxicity to daphnia and other aquatic invertebrates	:	EL50 (Daphnia magna (Water flea)): 10 mg/l Exposure time: 48 h Test Type: static test Test substance: WAF Method: OECD Test Guideline 202 Remarks: The toxicological data has been taken from products of similar composition.
Toxicity to algae	:	EL50 (Pseudokirchneriella subcapitata (green algae)): > 1 - 3 mg/l End point: Growth inhibition Exposure time: 72 h Test Type: static test Test substance: WAF Method: OECD Test Guideline 201 Remarks: The toxicological data has been taken from products of similar composition.
Ecotoxicology Assessment Short-term (acute) aquatic hazard	:	Toxic to aquatic life.
Long-term (chronic) aquatic hazard	:	Toxic to aquatic life with long lasting effects.

NAPHTHALENE**:**

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 0.91 - 2.82 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 1.09 - 3.4 mg/l Exposure time: 48 h Test Type: static test
Ecotoxicology Assessment Short-term (acute) aquatic hazard	:	Acute aquatic toxicity Category 1; Very toxic to aquatic life.
Long-term (chronic) aquatic hazard	:	Chronic aquatic toxicity Category 1; Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY**:**

Biodegradability	:	Remarks: Not readily biodegradable.

HYDROCARBONS, C10, AROMATICS, >1% NAPHTHALENE**:**

Biodegradability	:	Result: Inherently biodegradable.

NAPHTHALENE**:**

Biodegradability	:	Result: Not readily biodegradable.

No data available
Bioaccumulative potential
Components:
NAPHTHALENE**:**

Partition coefficient: n-octanol/water	:	log Pow: 3.30

No data available
Mobility in soil
Components:
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., Very toxic to aquatic life with long lasting effects.

Components:

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.
Contaminated packaging	:	Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No.	:	UN 1993
Proper shipping name	:	FLAMMABLE LIQUID, N.O.S. (HYDROTREATED HEAVY NAPHTHA)
Class	:	3
Packing group	:	III
Labels	:	Flammable Liquids
Packing instruction (cargo aircraft)	:	366

Packing instruction (passenger aircraft)	:	355
Environmentally hazardous	:	yes

IMDG-Code

UN number	:	UN 1993
Proper shipping name	:	FLAMMABLE LIQUID, N.O.S. (HYDROTREATED HEAVY NAPHTHA, POLYETHER AMINE, DISTILLATES (PETROLEUM), HYDROTREATED MIDDLE)
Class	:	3
Packing group	:	III
Labels	:	3
EmS Code	:	F-E, S-E
Marine pollutant	:	yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

TDG

UN number	:	UN 1993
Proper shipping name	:	FLAMMABLE LIQUID, N.O.S. ()
Class	:	3
Packing group	:	III
Labels	:	3
ERG Code	:	128
Marine pollutant	:	yes

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

NPRI Components	:	HYDROCARBONS, C10, AROMATICS, >1% NAPHTHALENE NAPHTHALENE BENZENE

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

TCSI	:	Not in compliance with the inventory

TSCA	:	All substances listed as active on the TSCA inventory
AIIC	:	Not in compliance with the inventory
DSL	:	All components of this product are on the Canadian DSL
ENCS	:	Not in compliance with the inventory
ISHL	:	Not 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
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

Canadian lists

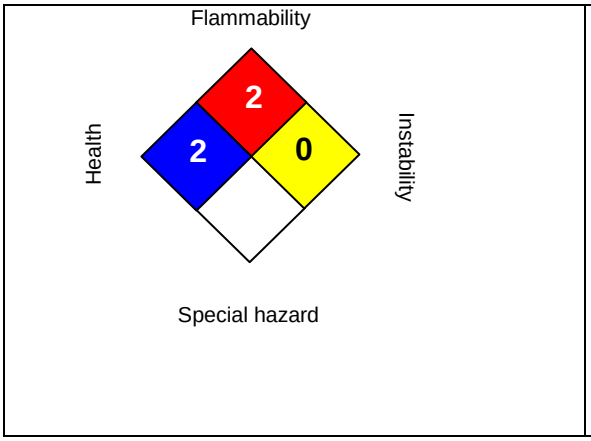
No substances are subject to a Significant New Activity Notification.

Inventories
AIIC (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TECI (Thailand), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information
Internal information : 000000130059

NFPA:	HMIS III:



HEALTH	3*
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

NFPA Flammable and Combustible Liquids Classification
Combustible Liquid Class II

Full text of H-Statements

H226	Flammable liquid and vapour.
H227	Combustible liquid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer if inhaled.

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-VALVOLINE).

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