

Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER

Version: 1.1 Revision Date: 05/12/2021 Print Date: 05/12/2021

GHS classification in accordance with the Hazardous Products Regulations

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name Valvoline Professional Series SUPER CONCENTRATED

FUEL INJECTOR

CLEANER

679710 Product code

Details of the supplier of the safety data sheet

Valvoline Canada Corp 905 Winston Churchill Blvd Mississauga ON L5J 4P2

Canada

1-800-TEAMVAL (1-800-832-6825)

Emergency telephone number

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)

SDS@valvoline.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 3

Skin irritation : Category 2

Eye irritation : Category 2A

Carcinogenicity (Inhalation) : Category 2

Specific target organ toxicity

- single exposure

: Category 3 (Respiratory system)

Aspiration hazard : Category 1

GHS label elements

Hazard pictograms





Signal word : Danger

SAFETY DATA SHEET

Valvoline Professional Series SUPER
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Hazard statements : H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation. H335 May cause respiratory 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.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

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.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

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 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.



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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

Hazardous components

Chamical name	CAS-No.	Classification	Concentration (9/)
Chemical name			Concentration (%)
NAPHTHA (PETROLEUM),	64742-48-9	Flam. Liq. 3; H226	>=70.00 - < 90.00
HYDROTREATED HEAVY		Oldin lamit O. 11045	
		Skin Irrit. 2; H315	
		Eye Irrit. 2A; H319	
		Lye IIII. ZA, H319	
		STOT SE 3; H335	
		0101023,11000	
		Asp. Tox. 1; H304	
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
		PHNOC 1;	
DISTILLATES, SWEETENED	64741-86-2	Flam. Liq. 3; H226	>=1.00 - < 5.00
MIDDLE			
		Eye Irrit. 2A; H319	
		Asp. Tox. 1; H304	
		DUNGO 4	
		PHNOC 1;	
PETROLEUM NAPHTHA	64742-94-5	Flam. Liq. 4; H227	>=1.00 - < 5.00
PETROLEUM NAPHTHA	04742-94-5		>=1.00 - < 5.00
		Skin Irrit. 2; H315	
		Okiii iiiit. 2, 11010	
		Eye Irrit. 2A; H319	
		Asp. Tox. 1; H304	
		PHNOC 1;	
NAPHTHALENE	91-20-3	Acute Tox. 4; H302	>=0.10 - < 1.00
		Carc. 2; H351	



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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. Symptoms of poisoning may appear several hours later.

Do not leave the victim unattended.

If inhaled : Move to fresh air.

If unconscious, place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : Remove contaminated clothing. If irritation develops, get

medical attention.

If on skin, rinse well with water.

Wash contaminated clothing before re-use.

If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

If swallowed : Obtain medical attention.

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.

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

abnormalities.

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through

workplace exposure limits is unlikely to cause pulmonary

the skin may include:

stomach or intestinal upset (nausea, vomiting, diarrhea)

irritation (nose, throat, airways)

May be fatal if swallowed and enters airways.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

Suspected of causing cancer if inhaled.

Notes to physician : No hazards which require special first aid measures.



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SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Water spray

Foam

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Never use welding or cutting torch on or near drum (even

empty) because product (even just residue) can ignite

explosively.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

: carbon

carbon dioxide and carbon monoxide

Aldehydes

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.

Use a water spray to cool fully closed containers.

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

: Evacuate personnel to safe areas. Remove all sources of ignition.

Use personal protective equipment.

Ensure adequate ventilation.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Persons not wearing protective equipment should be excluded

from area of spill until clean-up has been completed.

Prevent product from entering drains. **Environmental precautions**

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 : Contain spillage, and then collect with non-combustible

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containment and cleaning up absorbent material, (e.g. sand, earth, diatomaceous earth,

vermiculite) and place in container for disposal according to

local / national regulations (see section 13).

Other information : Comply with all applicable federal, state, and local regulations.

Suppress (knock down) gases/vapours/mists with a water

spray jet.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Open drum carefully as content may be under pressure.

Avoid formation of aerosol.

Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapours/dust.

Do not smoke.

Container hazardous when empty.

Take precautionary measures against static discharges. Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes.

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.

No smoking.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
NAPHTHA (PETROLEUM), HYDROTREATED HEAVY	64742-48-9	TWA	100 ppm	SUPLR EXP
PETROLEUM NAPHTHA	64742-94-5	TWA	200 mg/m3 (total hydrocarbon vapor)	CA AB OEL
NAPHTHALENE	91-20-3	TWA	10 ppm 52 mg/m3	CA AB OEL
		STEL	15 ppm 79 mg/m3	CA AB OEL



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TWA	10 ppm	CA BC OEL
TWAEV	10 ppm 52 mg/m3	CA QC OEL
STEV	15 ppm 79 mg/m3	CA QC OEL

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 : In the case of vapour formation use a respirator with an

approved filter.

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 : Wear chemical splash goggles when there is the potential for

exposure of the eyes to liquid, vapor or mist.

Skin and body protection : Wear as appropriate:

Impervious clothing

Safety shoes

Flame-resistant clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place. Discard gloves that show tears, pinholes, or signs of wear. Wear resistant gloves (consult your safety equipment

supplier).

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

When using do not eat or drink.

When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Odour : No data available

Odour Threshold : No data available

pH : No data available

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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

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 : 0.797 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 : Stable under recommended storage conditions.

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Possibility of hazardous

reactions

Conditions to avoid

Incompatible materials Hazardous decomposition

products

: Vapours may form explosive mixture with air.

: Heat, flames and sparks.

: Strong oxidizing agents

excessive heat

Aldehydes

carbon dioxide and carbon monoxide

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:

DISTILLATES, SWEETENED MIDDLE:

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

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: Not classified as acutely toxic by inhalation

under GHS.

: LD50 (Rabbit): > 2.0 g/kg Acute dermal toxicity

LD50 (Rat, male and female): > 2,500 mg/kg

Assessment: Not classified as acutely toxic by dermal

absorption under GHS.

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.



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Product:

Remarks : May cause skin irritation and/or dermatitis.

Result : Repeated exposure may cause skin dryness or cracking.

Components:

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY:

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

DISTILLATES, SWEETENED MIDDLE:

Result : Slight, transient irritation

PETROLEUM NAPHTHA:

Result : Irritating to skin.

NAPHTHALENE:

Result : Slight, transient irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks : Vapours may cause irritation to the eyes, respiratory system

and the skin.

Causes serious eye irritation.

Components:

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY:

Result : Irritating to eyes. Assessment : Irritating to eyes.

DISTILLATES, SWEETENED MIDDLE:

Result : Irritating to eyes.

PETROLEUM NAPHTHA:

Result : Irritating to eyes.

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.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Suspected of causing cancer if inhaled.



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Components:

NAPHTHALENE:

Carcinogenicity - : Limited evidence of carcinogenicity in inhalation studies with

Assessment animals.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause respiratory irritation.

Components:

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY:

Assessment : May cause respiratory irritation.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

May be fatal if swallowed and enters airways.

Components:

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY:

May be fatal if swallowed and enters airways.

DISTILLATES, SWEETENED MIDDLE:

May be fatal if swallowed and enters airways.

PETROLEUM NAPHTHA:

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

hazard

: Acute aquatic toxicity Category 3; Harmful to aquatic life.

Long-term (chronic) aquatic

C . Chi

: Chronic aquatic toxicity Category 3; Harmful to aquatic life

with long lasting effects.

Components:

PETROLEUM NAPHTHA: Ecotoxicology Assessment

Short-term (acute) aquatic

: Toxic to aquatic life.

hazard

Long-term (chronic) aquatic

hazard

: Toxic to aquatic life with long lasting effects.

NAPHTHALENE:

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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

NAPHTHA (PETROLEUM), HYDROTREATED HEAVY:

Biodegradability : Remarks: Not readily biodegradable.

NAPHTHALENE:

Biodegradability : Result: Not readily biodegradable.

No data available

Bioaccumulative potential

NAPHTHALENE:

Partition coefficient: n-

: log Pow: 3.30

octanol/water
No data available
Mobility in soil
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., 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.

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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 : 366

aircraft)

Packing instruction : 355

(passenger aircraft)

IMDG-Code

UN number : UN 1993

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

(HYDROTREATED HEAVY NAPHTHA)

Class : 3
Packing group : III
Labels : 3
EmS Code : F-E, S-E
Marine pollutant : no

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

Not applicable for product as supplied.

National Regulations

TDG

Class

Labels

ERG Code

Packing group

Marine pollutant

UN number : UN 1993

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

() : 3 : III : 3 : 128 : no

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.



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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

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

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

ENCS : 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

TSCA : On TSCA Inventory

Inventories

AICS (Australia), AIIC (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

Internal information: 000000130060



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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.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
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



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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 : Persistent , Bloaccumulative and 103

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

SAFETY DATA SHEET

Valvoline Professional Series™ Intake Cleaner

Version: 1.2 Revision Date: 11/10/2020 Print Date: 05/12/2021

GHS classification in accordance with the Hazardous Products Regulations

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Valvoline Professional Series™ Intake Cleaner

Product code : VP069

Details of the supplier of the safety data sheet

Valvoline Canada Corp 905 Winston Churchill Blvd Mississauga ON L5J 4P2

Canada

1-800-TEAMVAL (1-800-832-6825)

1 000 TEAMVAE (1 000 002 0020)

Emergency telephone number

1-800-VALVOLINE (1-800-825-8654)

Regulatory Information Number 1-800-TEAMVAL (1-800-832-6825)

Product Information

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SDS@valvoline.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 2

Skin irritation : Category 2

Eye irritation : Category 2A

Reproductive toxicity : Category 1B

Specific target organ toxicity

- single exposure

: Category 3 (Central nervous system, Respiratory system)

Specific target organ toxicity

- repeated exposure

: Category 2 (Auditory system)

Aspiration hazard : Category 1

Physical hazards not otherwise classified

: Category 1

GHS label elements



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Hazard pictograms







Signal word Danger

Hazard statements : H373 May cause damage to organs (Auditory system) through

prolonged or repeated exposure.

H360 May damage fertility or the unborn child. H336 May cause drowsiness or dizziness. H335 May cause respiratory irritation. H319 Causes serious eye irritation.

H315 Causes skin irritation.

H304 May be fatal if swallowed and enters airways.

May become electrostatically charged. Sparks may ignite liquid

and vapor.

H225 Highly flammable liquid and vapour.

Precautionary statements

: Prevention:

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P271 Use only outdoors or in a well-ventilated area.

P264 Wash skin thoroughly after handling.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P243 Take action to prevent static discharges.

P242 Use non-sparking tools.

P241 Use explosion-proof electrical/ ventilating/ lighting equipment.

P240 Ground and bond container and receiving equipment.

P233 Keep container tightly closed.

P210 Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking.

P202 Do not handle until all safety precautions have been read and understood.

P201 Obtain special instructions before use.

Response:

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P362 + P364 Take off contaminated clothing and wash it before reuse.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P332 + P313 If skin irritation occurs: Get medical advice/

P331 Do NOT induce vomiting.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



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P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Storage:

P405 Store locked up.

P403 + P235 Store in a well-ventilated place. Keep cool. P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

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 : Static Accumulator

Chemical nature : Defatter

Hazardous components

0 - < 60.00
0 - < 30.00



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	Flam. Liq. 4; H227	>=10.00 - < 30.00
	Asp. Tox. 1; H304	
872-50-4	Flam. Liq. 4; H227	>=10.00 - < 30.00
	Skin Irrit. 2; H315	
	Eye Irrit. 2A; H319	
	Repr. 1B; H360	
	STOT SE 3; H335	
	Acute Tox. 4; H302	>=5.00 - < 10.00
	Skin Irrit. 2; H315	
	Eye Dam. 1; H318	
100-41-4	Flam. Liq. 2; H225	>=5.00 - < 10.00
	Acute Tox. 4; H332	
	Skin Irrit. 2; H315	
	Eye Irrit. 2A; H319	
	STOT RE 2; H373	
	Asp. Tox. 1; H304	
	PHNOC 1;	
64742-46-7	Flam. Liq. 3; H226	>=5.00 - < 10.00
	Acute Tox. 4; H332	
	Skin Irrit. 2; H315	
	Asp. Tox. 1; H304	
	Acute Tox. 4; H302	>=0.10 - < 1.00
	100-41-4	Asp. Tox. 1; H304 872-50-4 Flam. Liq. 4; H227 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Repr. 1B; H360 STOT SE 3; H335 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 100-41-4 Flam. Liq. 2; H225 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 STOT RE 2; H373 Asp. Tox. 1; H304 PHNOC 1; 64742-46-7 Flam. Liq. 3; H226 Acute Tox. 4; H332 Skin Irrit. 2; H315 Asp. Tox. 1; H304

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		Eye Dam. 1; H318	
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	Flam. Liq. 4; H227 Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 3; H311 Skin Irrit. 2; H315 Eye Irrit. 2A; H319	>=0.10 - < 1.00

Actual concentration or concentration range is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice : Do not leave the victim unattended.

> Symptoms of poisoning may appear several hours later. Show this safety data sheet to the doctor in attendance.

Consult a physician.

Move out of dangerous area.

If inhaled Move to fresh air.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical

advice.

Consult a physician after significant exposure.

Remove contaminated clothing. If irritation develops, get In case of skin contact

medical attention.

If on skin, rinse well with water.

Wash contaminated clothing before re-use.

If on clothes, remove clothes.

In case of eye contact : Protect unharmed eye.

Remove contact lenses.

Continue rinsing eyes during transport to hospital.

In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

If swallowed : Obtain medical attention.

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. No symptoms known or expected.

Most important symptoms and effects, both acute and

delayed

May cause damage to organs through prolonged or repeated

exposure.

May damage fertility or the unborn child.

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May cause drowsiness or dizziness. May cause respiratory irritation. Causes serious eye irritation.

Causes skin irritation.

May be fatal if swallowed and enters airways.

Notes to physician : No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Water spray

Foam

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

Specific hazards during

firefighting

: High volume water jet

: Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite

explosively.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. 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 : Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations. Use a water spray to cool fully closed containers.

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 : Evacuate personnel to safe areas. Remove all sources of ignition. Use personal protective equipment.

Ensure adequate ventilation.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Persons not wearing protective equipment should be excluded

from area of spill until clean-up has been completed.



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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).

Other information : Comply with all applicable federal, state, and local regulations.

Suppress (knock down) gases/vapours/mists with a water

spray jet.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Open drum carefully as content may be under pressure.

Avoid formation of aerosol.

Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapours/dust.

Do not smoke.

Container hazardous when empty.

Take precautionary measures against static discharges. Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes.

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.

Container may be opened only under exhaust ventilation

hood.

Keep container tightly closed in a dry and well-ventilated Conditions for safe storage

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Observe label precautions.

No smoking.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components with workplace control parameters				
Components	CAS-No.	Value type	Control	Basis
		(Form of	parameters /	
		exposure)	Permissible	
			concentration	
XYLENE	1330-20-7	STEL	150 ppm	CA AB OEL



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			651 mg/m3	
		TWA	100 ppm 434 mg/m3	CA AB OEL
		TWAEV	100 ppm 434 mg/m3	CA QC OEL
		STEV	150 ppm 651 mg/m3	CA QC OEL
		TWA	100 ppm	CA BC OEL
		STEL	150 ppm	CA BC OEL
METHYL-N 2-PYRROLIDONE	872-50-4	TWA	400 mg/m3	CA ON OEL
ETHYL BENZENE	100-41-4	TWA	100 ppm 434 mg/m3	CA AB OEL
		STEL	125 ppm 543 mg/m3	CA AB OEL
		TWA	20 ppm	CA BC OEL
		STEV	125 ppm 543 mg/m3	CA QC OEL
		TWAEV	100 ppm 434 mg/m3	CA QC OEL
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	TWA	20 ppm 97 mg/m3	CA AB OEL
		TWA	20 ppm	CA BC OEL
		TWAEV	20 ppm 97 mg/m3	CA QC OEL

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

In the case of vapour formation use a respirator with an

approved filter.

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 airpurifying respirators is limited. Use a positive pressure, airsupplied 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.

No personal respiratory protective equipment normally required.

Hand protection

The suitability for a specific workplace should be discussed Remarks

with the producers of the protective gloves.

Eye protection Maintain eye wash station in immediate work area.

> Wear chemical splash goggles and face shield when there is potential for exposure of the eyes or face to liquid, vapor or

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mist.

Skin and body protection Wear as appropriate:

Impervious clothing

Safety shoes

Flame-resistant clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place. Discard gloves that show tears, pinholes, or signs of wear. Wear resistant gloves (consult your safety equipment

supplier).

Hygiene measures Wash hands before breaks and at the end of workday.

> When using do not eat or drink. When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid

Odour No data available

Odour Threshold No data available

No data available pΗ

No data available Melting point/freezing point

: 137 °C Boiling point/boiling range

Calculated Phase Transition Liquid/Gas

Flash point 9.4 °C

Method: Tag closed cup

No data available Evaporation rate

Flammability (solid, gas) No data available

Flammability (liquids) Static-accumulating flammable liquid.

Self-ignition No data available

Upper explosion limit / Upper

24.6 %(V)

flammability limit

GLP: Calculated Explosive Limit

Lower explosion limit / Lower :

0.9 %(V)

flammability limit

GLP: Calculated Explosive Limit

Vapour pressure 60 hPa (20 °C)

Calculated Vapor Pressure

Relative vapour density No data available

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Relative density : No data available

Density : 0.853 g/cm3 (15.56 °C)

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

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 : Stable under recommended storage conditions.
Possibility of hazardous : Vapours may form explosive mixture with air.

reactions

Conditions to avoid : Heat, flames and sparks.

Exposure to light.
Exposure to moisture

Do not allow evaporation to dryness.

excessive heat

Incompatible materials : Strong oxidizing agents

Strong bases strong alkalis Strong acids Reducing agents perchloric acid Nitric acid fluorides alkalis

Hazardous decomposition

products No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION



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Information on likely routes of exposure

Inhalation Skin contact Eye Contact Ingestion Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: 2,472 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 40 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : Acute toxicity estimate: 4,478 mg/kg

Method: Calculation method

Components:

XYLENE:

Acute oral toxicity : LD50 (Rat): 3,523 - 8,600 mg/kg

Acute inhalation toxicity : LC50 (Rat): 29 mg/l, 6700 ppm

Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): 1,700 mg/kg

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:Acute oral toxicity : LD50 (Rat): > 8,000 mg/kg

Acute dermal toxicity : LD50 (Rat): > 4,000 mg/kg

Assessment: Not classified as acutely toxic by dermal

absorption under GHS.

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

METHYL-N 2-PYRROLIDONE:

Acute oral toxicity : LD50 (Rat): 4,150 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5.1 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: Not classified as acutely toxic by inhalation

under GHS.

Acute dermal toxicity : LD50 (Rabbit): 8,000 mg/kg



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

ALKYL ETHERS:

Acute oral toxicity : Assessment: The component/mixture is classified as acute

oral toxicity, category 4.

ETHYL BENZENE:

Acute oral toxicity : LD50 (Rat): ca. 3,500 mg/kg

Acute inhalation toxicity : LC50 (Rat): 4000 ppm

Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): 17,800 mg/kg

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 classified as acute

oral toxicity, category 4.

ETHYLENE GLYCOL MONOBUTYL ETHER:

Acute oral toxicity : LD50 (Guinea pig): 1,200 mg/kg

Acute inhalation toxicity : LC50 (Rat): 2.17 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The component/mixture is classified as acute

inhalation toxicity, category 4.

Acute dermal toxicity : LD50 (Rabbit): 400 - 500 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Product:

Result : Repeated exposure may cause skin dryness or cracking.

Remarks : May cause skin irritation and/or dermatitis.

Components:

XYLENE:

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

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

Result : Slight, transient irritation



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

Result : No skin irritation

METHYL-N 2-PYRROLIDONE:

Assessment : Irritating to skin.

Result : irritating

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

ALKYL ETHERS:

Result : Irritating to skin.

ETHYL BENZENE:

Result : Irritating to skin.

Distillates (petroleum), hydrotreated middle:Result : Irritating to skin.

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

Result : Irritating to skin.

ETHYLENE GLYCOL MONOBUTYL ETHER:

Species : Rabbit

Result : Irritating to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks : May cause irreversible eye damage.

Components: XYLENE:

Result : Irritating to eyes.

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

Result : Slight, transient irritation

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

Result : Slight, transient irritation

METHYL-N 2-PYRROLIDONE:

Result : Irritation to eyes, reversing after 7 to 21 days

Assessment : Irritating to eyes.

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

ALKYL ETHERS:

Result : Risk of serious damage to eyes.

ETHYL BENZENE:

Result : Irritating to eyes.



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

Result : Risk of serious damage to eyes.

ETHYLENE GLYCOL MONOBUTYL ETHER:

Species : Rabbit

Result : Irritating to eyes.

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

METHYL-N 2-PYRROLIDONE:

Assessment : Does not cause skin sensitisation.

Result : Did not cause sensitisation on laboratory animals.

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.

ETHYLENE GLYCOL MONOBUTYL ETHER:

Test Type : Maximisation Test

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Germ cell mutagenicity

Not classified based on available information.

Components:

METHYL-N 2-PYRROLIDONE:

Genotoxicity in vitro : Remarks: In vitro tests did not show mutagenic effects

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse Application Route: Oral Result: negative

Test Type: chromosome aberration assay

Species: Chinese hamster Application Route: Oral Result: negative

ETHYLENE GLYCOL MONOBUTYL ETHER:

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Genotoxicity in vitro : Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Result: negative

Carcinogenicity

Not classified based on available information.

Components:

METHYL-N 2-PYRROLIDONE:

Species : Rat Application Route : Oral

NOAEL : 678 mg/kg body weight

Species : Rat

Application Route : inhalation (dust/mist/fume)

NOAEL : 0.4 mg/l

Reproductive toxicity

May damage fertility or the unborn child.

Components:

METHYL-N 2-PYRROLIDONE:

Effects on fertility : Species: Rat

Application Route: Ingestion Fertility: NOAEL Parent: 350

Result: Animal testing did not show any effects on fertility.

Effects on foetal : Species: Rat

development Application Route: inhalation (dust/mist/fume)

Dose: 0,12, 0,25, 0,49 milligram per liter

General Toxicity Maternal: NOAEC: 123 mg/m³

Teratogenicity: NOAEC F1: 494 mg/m³
Developmental Toxicity: NOAEC: 247 mg/m³

Species: Rat

Application Route: Oral

Dose: 0, 125, 250, 500, 750 milligram per kilogram

General Toxicity Maternal: NOAEL: 250 mg/kg body weight Developmental Toxicity: NOAEL F1: 125 mg/kg body weight

Species: Rat

Application Route: Dermal

Dose: 0, 75, 237, 750 milligram per kilogram

General Toxicity Maternal: NOAEL: 237 mg/kg body weight

Teratogenicity: NOAEL F1: 237 mg/kg body weight

Developmental Toxicity: NOAEL F1: 237 mg/kg body weight

Reproductive toxicity -

Assessment

Clear evidence of adverse effects on sexual function and

fertility, and/or on development, based on animal experiments



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STOT - single exposure

May cause drowsiness or dizziness. May cause respiratory irritation.

Components:

XYLENE:

Assessment : May cause respiratory irritation.

Assessment : May cause drowsiness or dizziness.

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

Assessment : The substance or mixture is classified as specific target organ

toxicant, single exposure, category 3 with narcotic effects.

METHYL-N 2-PYRROLIDONE:

Exposure routes : Inhalation Target Organs : Nose

Assessment : May cause respiratory irritation.

STOT - repeated exposure

May cause damage to organs (Auditory system) through prolonged or repeated exposure.

Components: ETHYL BENZENE:

Target Organs : Auditory system

Assessment : May cause damage to organs through prolonged or repeated

exposure.

Repeated dose toxicity

Components:

METHYL-N 2-PYRROLIDONE:

Species : Rat

NOAEL : 169 mg/kg Application Route : Ingestion Exposure time : 28 d

Species : Rat

NOAEL : 0.5 mg/l

Application Route : Inhalation

Test atmosphere : dust/mist

Exposure time : 28 d

Species : Rabbit
NOAEL : 826 mg/kg
Application Route : Skin contact

Exposure time : 28 d

Aspiration toxicity

May be fatal if swallowed and enters airways.

Components:

XYLENE:

May be fatal if swallowed and enters airways.

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SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

May be fatal if swallowed and enters airways.

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

May be fatal if swallowed and enters airways.

ETHYL BENZENE:

May be fatal if swallowed and enters airways.

Distillates (petroleum), hydrotreated middle:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks : Symptoms of overexposure may be headache, dizziness,

tiredness, nausea and vomiting.

Concentrations substantially above the TLV value may cause

narcotic effects.

Solvents may degrease the skin.

Components:

ETHYL BENZENE:

Remarks : Central nervous system

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Short-term (acute) aquatic : Acute aquatic toxicity Category 2; Toxic to aquatic life.

hazard

Long-term (chronic) aquatic

hazard

. Acute aquatic toxicity Category 2, Toxic to aquatic life.

: Chronic aquatic toxicity Category 2; Toxic to aquatic life with long lasting effects.

Components:

XYLENE:

Toxicity to daphnia and other

aquatic invertebrates

: LC50 (Daphnia magna (Water flea)): > 100 - < 1,000 mg/l

Exposure time: 24 h
Test Type: static test

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

Ecotoxicology Assessment

Short-term (acute) aquatic : Toxic to aquatic life.

hazard

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

nazard

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



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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

Exposure time: 72 h

METHYL-N 2-PYRROLIDONE:

: LC50 (Lepomis macrochirus (Bluegill sunfish)): 832 mg/l Toxicity to fish

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 24 h

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 600 mg/l

Exposure time: 72 h

Test Type: Growth inhibition

NOEC (Desmodesmus subspicatus (green algae)): 125 mg/l

Exposure time: 72 h

Test Type: Growth inhibition

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOEC (Daphnia magna (Water flea)): 12.5 mg/l

Exposure time: 21 d

End point: Reproduction Test Test Type: semi-static test

Method: OECD Test Guideline 211

Toxicity to bacteria : EC10 (activated sludge): 100 mg/l

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

ALKYL ETHERS:

Ecotoxicology Assessment

Short-term (acute) aquatic : Very toxic to aquatic life.

hazard

Long-term (chronic) aquatic

hazard

: Very toxic to aquatic life with long lasting effects.

ETHYL BENZENE:

: LC50 (Pimephales promelas (fathead minnow)): 9.1 - 15.6 Toxicity to fish

mg/l

Exposure time: 96 h Test Type: static test

LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l

Exposure time: 96 h Test Type: Renewal

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 1.37 - 4.4 mg/l

Exposure time: 48 h Test Type: static test



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Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 3.6

mg/l

End point: Growth inhibition

Exposure time: 96 h

Ecotoxicology Assessment

Short-term (acute) aquatic : Acute aquatic toxicity Category 2; Toxic to aquatic life.

hazard

Long-term (chronic) aquatic : Not classified based on available information.

hazard

Distillates (petroleum), hydrotreated middle:

Ecotoxicology Assessment

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

hazard

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

Ecotoxicology Assessment

Short-term (acute) aquatic : Very toxic to aquatic life.

hazard

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.

ETHYLENE GLYCOL MONOBUTYL ETHER:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1,474 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 1,550 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 911

mg/l

End point: Growth inhibition Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

Toxicity to fish (Chronic

toxicity)

: NOEC (Danio rerio (zebra fish)): > 100 mg/l

Exposure time: 21 d

Test Type: semi-static test

Method: OECD Test Guideline 204

Persistence and degradability Components:

19 / 25



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XYLENE:

Physico-chemical : Remarks: The product evaporates readily.

removability

METHYL-N 2-PYRROLIDONE:

Biodegradability : Biodegradation: 73 %

Exposure time: 28 d

Method: OECD Test Guideline 301C Remarks: Readily biodegradable

Photodegradation

ETHYL BENZENE:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 70 - 80 %

Exposure time: 28 d

ETHYLENE GLYCOL MONOBUTYL ETHER:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 90.4 % Exposure time: 28 d

Method: OECD Test Guideline 301B

No data available

Bioaccumulative potential

Components:

XYLENE:

Partition coefficient: n- : log Pow: 3.16

octanol/water

METHYL-N 2-PYRROLIDONE:

Bioaccumulation : Remarks: No bioaccumulation is to be expected (log Pow <=

3).

Partition coefficient: n-

: log Pow: -0.46 (25 °C)

octanol/water

ETHYL BENZENE:

Partition coefficient: n- : log Pow: 3.15

octanol/water

ETHYLENE GLYCOL MONOBUTYL ETHER:
Partition coefficient: n- : log Pow: 0.83

octanol/water
No data available
Mobility in soil
Components:
No data available

Other adverse effects

Product:

Additional ecological : An environmental hazard cannot be excluded in the event of information unprofessional handling or disposal., Toxic to aquatic life with

long lasting effects.

Components:

METHYL-N 2-PYRROLIDONE:

Results of PBT and vPvB : This substance is not considered to be persistent,

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assessment bioaccumulating and toxic (PBT). This substance is

considered to be very persistent and very bioaccumulating

(vPvB).

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.

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.

(, XYLENE)

Class : 3 Packing group : II

Labels : Flammable Liquids

Packing instruction (cargo : 364

aircraft)

Packing instruction : 353

(passenger aircraft)

Environmentally hazardous : yes

IMDG-Code

UN number : UN 1993

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

(, XYLENE, ALIPHATIC PETROLEUM NAPHTHA,

POLYETHER AMINE)

Class : 3
Packing group : II
Labels : 3

EmS Code : F-E, <u>S-E</u> Marine pollutant : yes



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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 : II
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 : XYLENE

METHYL-N 2-PYRROLIDONE

ETHYL BENZENE

ETHYLENE GLYCOL MONOBUTYL ETHER

NAPHTHALENE

TOLUENE BENZENE

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

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

ENCS : 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

TCSI : Not in compliance with the inventory



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TSCA : On TSCA Inventory

Inventories

AICS (Australia), AIIC (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

Internal information: R0356736

NFPA:	HMIS III:

NFPA Flammable and Combustible Liquids Classification

Flammable Liquid Class IB

Full text of H-Statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H227	Combustible liquid.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
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.
H360	May damage fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.



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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



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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



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GHS classification in accordance with the Hazardous Products Regulations

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Valvoline Professional Series THROTTLE BODY SPRAY

Throttle Body Cleaner

Product code : VP072

Details of the supplier of the safety data

Valvoline Canada Corp 905 Winston Churchill Blvd Mississauga ON L5J 4P2

Canada

1-800-TEAMVAL (1-800-832-6825)

Emergency telephone number

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)

SDS@valvoline.com

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable aerosols : Category 1

Eye irritation : Category 2A

Specific target organ toxicity

- single exposure

: Category 1 (Central nervous system, Eyes)

Specific target organ toxicity

- single exposure

: Category 3 (Central nervous system)

Specific target organ toxicity

- repeated exposure

: Category 2 (Auditory system)

GHS label elements

Hazard pictograms





Signal word : Danger

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Hazard statements : H222 Extremely flammable aerosol.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H370 Causes damage to organs (Central nervous system,

Eyes).

H373 May cause damage to organs (Auditory system) through

prolonged or repeated exposure.

Precautionary statements : **Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection/ face protection.

Response:

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/

doctor if you feel unwell.

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 + P311 IF exposed or concerned: Call a POISON

CENTER/ doctor.

P337 + P313 If eye irritation persists: Get medical advice/

attention. Storage:

P403 + P233 Store in a well-ventilated place. Keep container

tightly closed.

P405 Store locked up.

P410 + P412 Protect from sunlight. Do not expose to

temperatures exceeding 50 °C/ 122 °F.

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 : Aspiration hazard Chemical nature : Static Accumulator

Chemical nature : Defatter

Hazardous components



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Chemical name	CAS-No.	Classification	Concentration (%)
ACETONE	67-64-1	Flam. Liq. 2; H225	>=70.00 - < 90.00
		Eye Irrit. 2A; H319	
		STOT SE 3; H336	
CARBON DIOXIDE	124-38-9	Press. Gas Liquefied gas; H280	>=5.00 - < 10.00
		SA 1;	
XYLENE	1330-20-7	Flam. Liq. 3; H226	>=5.00 - < 10.00
		Acute Tox. 4; H312	
		Skin Irrit. 2; H315	
		Eye Irrit. 2A; H319	
		STOT SE 3; H335, H336	
		Asp. Tox. 1; H304	
		PHNOC 1;	
METHANOL	67-56-1	Flam. Liq. 2; H225	>=1.00 - < 5.00
		Acute Tox. 3; H301	
		Acute Tox. 3; H331	
		Acute Tox. 3; H311	
		STOT SE 1; H370	
ETHYL BENZENE	100-41-4	Flam. Liq. 2; H225	>=1.00 - < 5.00
		Acute Tox. 4; H332	
		Skin Irrit. 2; H315	
		Eye Irrit. 2A; H319	
		STOT RE 2; H373	
		Asp. Tox. 1; H304	



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PHNOC 1;

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 Move to fresh air.

If unconscious, place in recovery position and seek medical

advice.

Consult a physician after significant exposure.

In case of skin contact : Remove contaminated clothing. If irritation develops, get

medical attention.

If on skin, rinse well with water.

Wash contaminated clothing before re-use. : Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

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

Causes serious eye irritation.

In case of eye contact

May cause drowsiness or dizziness.

delayed

Causes damage to organs.

May cause damage to organs through prolonged or repeated

exposure.

No symptoms known or expected.

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

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite

explosively.



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Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

: carbon dioxide and carbon monoxide

Hydrocarbons Aldehydes

Specific extinguishing

methods

•

Product is compatible with standard fire-fighting agents.

: Use a water spray to cool fully closed containers.

Further information Special protective equipment

Special protective equi

for firefighters

In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas. Remove all sources of ignition.

Use personal protective equipment.

Ensure adequate ventilation.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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.

Other information : Comply with all applicable federal, state, and local regulations.

Suppress (knock down) gases/vapours/mists with a water

spray jet.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Open drum carefully as content may be under pressure.

Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapours/dust.

Do not smoke.

Container hazardous when empty.

Take precautionary measures against static discharges. Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes.

Smoking, eating and drinking should be prohibited in the

application area.

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For personal protection see section 8.

Dispose of rinse water in accordance with local and national

regulations.

Container may be opened only under exhaust ventilation

hood.

Conditions for safe storage : BEWARE: Aerosol is pressurized. Keep away from direct sun

exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or

red-hot objects.

Keep container tightly closed in a dry and well-ventilated

place.

Observe label precautions.

No smoking.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type	Control	Basis
		(Form of	parameters /	
		exposure)	Permissible	
			concentration	
ACETONE	67-64-1	TWA	500 ppm	CA AB OEL
			1,200 mg/m3	
		STEL	750 ppm	CA AB OEL
			1,800 mg/m3	
		TWA	250 ppm	CA BC OEL
		STEL	500 ppm	CA BC OEL
		STEV	1,000 ppm	CA QC OEL
			2,380 mg/m3	
		TWAEV	500 ppm	CA QC OEL
			1,190 mg/m3	
CARBON DIOXIDE	124-38-9	TWA	5,000 ppm	CA AB OEL
			9,000 mg/m3	
		STEL	30,000 ppm	CA AB OEL
			54,000 mg/m3	
		TWA	5,000 ppm	CA BC OEL
		STEL	15,000 ppm	CA BC OEL
		STEV	30,000 ppm	CA QC OEL
			54,000 mg/m3	
		TWAEV	5,000 ppm	CA QC OEL
			9,000 mg/m3	
XYLENE	1330-20-7	STEL	150 ppm	CA AB OEL
			651 mg/m3	
		TWA	100 ppm	CA AB OEL
			434 mg/m3	
		TWAEV	100 ppm	CA QC OEL
			434 mg/m3	
		STEV	150 ppm	CA QC OEL



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			651 mg/m3	
		TWA	100 ppm	CA BC OEL
		STEL	150 ppm	CA BC OEL
METHANOL	67-56-1	TWA	200 ppm 262 mg/m3	CA AB OEL
		STEL	250 ppm 328 mg/m3	CA AB OEL
		TWA	200 ppm	CA BC OEL
		STEL	250 ppm	CA BC OEL
		TWAEV	200 ppm 262 mg/m3	CA QC OEL
		STEV	250 ppm 328 mg/m3	CA QC OEL
ETHYL BENZENE	100-41-4	TWA	100 ppm 434 mg/m3	CA AB OEL
		STEL	125 ppm 543 mg/m3	CA AB OEL
		TWA	20 ppm	CA BC OEL
		STEV	125 ppm 543 mg/m3	CA QC OEL
		TWAEV	100 ppm 434 mg/m3	CA QC OEL

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

In the case of vapour formation use a respirator with an

approved filter.

In the case of dust or aerosol formation use respirator with an

approved filter.

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 : Wear chemical splash goggles when there is the potential for

exposure of the eyes to liquid, vapor or mist.

Skin and body protection : Wear as appropriate:

Impervious clothing

Safety shoes



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Flame-resistant clothing

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.

When using do not eat or drink. When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : aerosol

Odour : No data available

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 : -20 °C

Value for Component

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

36 %(V)

GLP: Calculated Explosive Limit

Lower explosion limit / Lower

flammability limit

1 %(V)

GLP: Calculated Explosive Limit

Vapour pressure : > 9,999 hPa (21 °C)

Value for Component

Relative vapour density : No data available

Relative density : No data available

Density : 0.756 g/cm3 (21.1 °C)

Solubility(ies)

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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 : Stable under recommended storage conditions.
Possibility of hazardous : Vapours may form explosive mixture with air.

reactions

Conditions to avoid : Heat, flames and sparks.

excessive heat

Incompatible materials : Acids

alkalis aluminum Amines Ammonia fluorides halogens Lead

perchloric acid peroxides

Reducing agents

sodium strong bases

Strong oxidizing agents

Zinc Peroxides

Hazardous decomposition

products No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Skin contact



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Eye Contact Ingestion

Acute toxicity

Not classified based on available information.

Components: ACETONE:

Acute oral toxicity : LD50 (Rat, female): 5,800 mg/kg

Acute inhalation toxicity : LC50 (Rat, female): 76 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): > 7,426 mg/kg

XYLENE:

Acute oral toxicity : LD50 (Rat): 3,523 - 8,600 mg/kg

Acute inhalation toxicity : LC50 (Rat): 29 mg/l, 6700 ppm

Exposure time: 4 h

Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): 1,700 mg/kg

METHANOL:

Acute oral toxicity : LDLo (Human): 300 mg/kg

Assessment: The component/mixture is classified as acute

oral toxicity, category 3.

Acute inhalation toxicity : Test atmosphere: vapour

Assessment: The component/mixture is classified as acute

inhalation toxicity, category 3.

Acute dermal toxicity : Assessment: The component/mixture is classified as acute

dermal toxicity, category 3.

ETHYL BENZENE:

Acute oral toxicity : LD50 (Rat): ca. 3,500 mg/kg

Acute inhalation toxicity : LC50 (Rat): 4000 ppm

Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): 17,800 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks : May cause skin irritation in susceptible persons.

Result : Repeated exposure may cause skin dryness or cracking.



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Components:

ACETONE:

Result : Slight, transient irritation

Result : Repeated exposure may cause skin dryness or cracking.

CARBON DIOXIDE:

Assessment : No skin irritation Result : No skin irritation

XYLENE:

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

METHANOL:

Species : Rabbit

Result : No skin irritation

ETHYL BENZENE:

Result : Irritating to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks : Vapours may cause irritation to the eyes, respiratory system

and the skin.

Causes serious eye irritation.

Components:

ACETONE:

Result : Irritating to eyes.
Assessment : Irritating to eyes.

CARBON DIOXIDE:

Result : No eye irritation

XYLENE:

Result : Irritating to eyes.

METHANOL:

Species : Rabbit

Result : Slight, transient irritation

ETHYL BENZENE:

Result : Irritating to eyes.

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

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Components:

METHANOL:

Test Type : Maximisation Test

Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

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

May cause drowsiness or dizziness.

Causes damage to organs (Central nervous system, Eyes).

Components:

ACETONE:

Exposure routes : Inhalation

Target Organs : Nervous system

Assessment : May cause drowsiness or dizziness.

XYLENE:

Assessment : May cause respiratory irritation.

Assessment : May cause drowsiness or dizziness.

METHANOL:

Target Organs : Central nervous system, Eyes

Assessment : The substance or mixture is classified as specific target organ

toxicant, single exposure, category 1.

STOT - repeated exposure

May cause damage to organs (Auditory system) through prolonged or repeated exposure.

Components:

ETHYL BENZENE:

Target Organs : Auditory system

Assessment : May cause damage to organs through prolonged or repeated

exposure.

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Components:

ACETONE:

May be harmful if swallowed and enters airways.

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XYLENE:

May be fatal if swallowed and enters airways.

ETHYL BENZENE:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks : Symptoms of overexposure may be headache, dizziness,

tiredness, nausea and vomiting.

Concentrations substantially above the TLV value may cause

narcotic effects.

Solvents may degrease the skin.

Components: METHANOL:

Remarks : Central nervous system

ETHYL BENZENE:

Remarks : Central nervous system

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Short-term (acute) aquatic

hazard

Long-term (chronic) aquatic

hazard

: Not classified based on available information.

: Not classified based on available information.

Components: ACETONE:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4,740 - 6,330

mg/l

Exposure time: 96 h Test Type: static test

LC50 (Pimephales promelas (fathead minnow)): 8,733 - 9,482

mg/l

Exposure time: 96 h

Test Type: flow-through test

Toxicity to algae : NOEC (Microcystis aeruginosa (blue-green algae)): 530 mg/l

Exposure time: 8 d Test Type: static test

Toxicity to daphnia and other aquatic invertebrates

(Chronic toxicity)

: NOEC (Daphnia magna (Water flea)): 2,112 mg/l

Exposure time: 28 d

Test Type: flow-through test



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XYLENE:

Toxicity to daphnia and other

aquatic invertebrates

: LC50 (Daphnia magna (Water flea)): > 100 - < 1,000 mg/l

Exposure time: 24 h Test Type: static test

METHANOL:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 18,000 - 20,000

mg/

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 48 h Test Type: static test

ETHYL BENZENE:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 9.1 - 15.6

mg/l

Exposure time: 96 h Test Type: static test

LC50 (Oncorhynchus mykiss (rainbow trout)): 4.2 mg/l

Exposure time: 96 h Test Type: Renewal

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 1.37 - 4.4 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 3.6

mg/i

End point: Growth inhibition

Exposure time: 96 h

Ecotoxicology Assessment

Short-term (acute) aquatic

hazard

: Acute aquatic toxicity Category 2; Toxic to aquatic life.

Long-term (chronic) aquatic

hazard

: Not classified based on available information.

Persistence and degradability

Components: ACETONE:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 90.9 % Exposure time: 28 d

Method: OECD Test Guideline 301B

XYLENE:

Physico-chemical

: Remarks: The product evaporates readily.

removability METHANOL:

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Biodegradability : Result: Readily biodegradable.

Biodegradation: 99 % Exposure time: 28 d

Method: OECD Test Guideline 301D

ETHYL BENZENE:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 70 - 80 % Exposure time: 28 d

: log Pow: -0.24

: log Pow: 3.16

: log Pow: -0.77

: log Pow: 3.15

No data available

Bioaccumulative potential

Components:

ACETONE:

Partition coefficient: n-

artition coefficient:

octanol/water

XYLENE:

Partition coefficient: n-

octanol/water METHANOL:

Partition coefficient: n-

octanol/water

ETHYL BENZENE:

Partition coefficient: n-

octanol/water

No data available **Mobility in soil**

Components:

No data available

Other adverse effects

No data available

Product:

Additional ecological

information **Components:**

: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : Do not dispose of waste into sewer.

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.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.



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SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No. : UN 1950
Proper shipping name : AEROSOLS

Class : 2.1

Packing group : Not assigned by regulation

Labels : Flammable Gas

Packing instruction (cargo : 203

aircraft)

Packing instruction : 203

(passenger aircraft)

IMDG-Code

UN number : UN 1950
Proper shipping name : AEROSOLS

Class : 2.1

Packing group : Not assigned by regulation

Labels : 2.1 EmS Code : F-D, S-U Marine pollutant : no

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 1950
Proper shipping name : AEROSOLS

Class : 2.1

Packing group : Not assigned by regulation

Labels : 2.1
ERG Code : 126
Marine pollutant : no

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

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

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

TCSI : On the inventory, or in compliance with the inventory

TSCA : On TSCA Inventory

Inventories

AICS (Australia), AIIC (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

Internal information: 000000132750

NFPA:	HMIS III:

NFPA Flammable and Combustible Liquids Classification

Not applicable

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Full text of H-Statements

I ull lext of H-Statellie	111.5
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.

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



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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