	Page: 1 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 000000130060 Version: 1.1
679710	

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER

Product code : 679710

Company : Valvoline LLC  
3499 Blazer Parkway  
Lexington, KY 40509  
  
United States of America

E-mail address : SDS@valvoline.com  
Telephone : 1-800-TEAMVAL  
Telefax :

Emergency telephone number : 1-800-VALVOLINE

## 2. HAZARDS IDENTIFICATION

### GHS Classification


Flammable liquids : Category 3  
Skin irritation : Category 2  
Eye irritation : Category 2A  
Carcinogenicity : Category 2  
Specific target organ toxicity - single exposure : Category 3 (Respiratory system)  
Aspiration hazard : Category 1  
Acute aquatic toxicity : Category 3  
Chronic aquatic toxicity : Category 3

### GHS-Labeling

Hazard pictograms : 

Signal word : Danger

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.  
H412 Harmful to aquatic life with long lasting effects.

	Page: 2 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 000000130060 Version: 1.1
679710	

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/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- 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.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**


- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- 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.
- P405 Store locked up.

**Disposal:**

- P501 Dispose of contents/ container to an approved waste disposal plant.

	Page: 3 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 000000130060 Version: 1.1
679710	

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

Chemical Name	CAS-No.	Concentration
HYDROTREATED HEAVY NAPHTHA	64742-48-9	>=60 - <=100 %
POLYMER		>=5 - <10 %
DISTILLATES, SWEETENED MIDDLE	64741-86-2	>=1 - <5 %
PETROLEUM NAPHTHA	64742-94-5	>=1 - <5 %
POLYETHER AMINE		>=0.1 - <1 %
NAPHTHALENE	91-20-3	>=0.1 - <1 %

### 4. FIRST AID MEASURES

General advice : Consult a physician.  
Show this safety data sheet to the doctor in attendance.

#### First aid measures for different exposure routes


In case of eye contact : Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.  
Remove contact lenses.

In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off immediately with plenty of water.  
If skin irritation persists, call a physician.

If inhaled : Move to fresh air.  
Consult a physician after significant exposure.  
If symptoms persist, call a physician.  
In case of shortness of breath, give oxygen.

If swallowed : Do NOT induce vomiting.  
Never give anything by mouth to an unconscious person.  
Obtain medical attention.

Most important symptoms and effects, both acute and delayed (new) : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
sweating  
Fever  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)  
Lung irritation  
central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness)  
Abdominal pain

	Page: 4 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 000000130060 Version: 1.1
679710	

confusion  
 blood abnormalities (breakage of red blood cells)  
 kidney damage  
 lung damage

Inhalation or ingestion of high levels of this material (or a component) may cause a hemolytic reaction. Complications of acute intravascular hemolysis include anemia, leukocytosis, fever, hemoglobinuria, jaundice, renal insufficiency, and sometimes disturbances in liver function.

Fats, for example, baby oil on the skin or ingested oil, facilitate absorption of naphthalene.

Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.


Notes to physician (new) :

No hazards which require special first aid measures.

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## 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : ABC powder  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical  
Water mist
- Unsuitable extinguishing media : Halons
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Aldehydes  
carbon  
carbon dioxide and carbon monoxide
- Specific extinguishing : Keep containers and surroundings cool with water spray.

	Page: 5 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 000000130060 Version: 1.1
679710	

methods : Prevent fire extinguishing water from contaminating surface water or the ground water system.  
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.

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment.

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## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.  
Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind.

Environmental precautions : Prevent further leakage or spillage if safe to do so.

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).  
Keep in suitable, closed containers for disposal.

Additional advice : Comply with all applicable federal, state, and local regulations.

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## 7. HANDLING AND STORAGE

### Handling

Technical measures : Take measures to prevent the build up of electrostatic charge.  
Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.  
Keep product and empty container away from heat and sources of ignition.  
No sparking tools should be used.  
Avoid formation of aerosol.

Advice on safe handling : Do not breathe vapours or spray mist.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Avoid exceeding of the given occupational exposure limits (see section 8).  
Smoking, eating and drinking should be prohibited in the application area.  
Ensure all equipment is electrically grounded and bonded before beginning transfer operations.

Avoidance of contact : Strong oxidizing agents

	Page: 6 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 00000130060 Version: 1.1
679710	

### Storage

Conditions for safe storage : Store in original container.  
Keep containers tightly closed in a dry, cool and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Materials to avoid : Strong oxidizing agents

Other data : Stable under recommended storage conditions.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters


Components	CAS-No.	Value (Form of exposure)	Control parameters / Permissible concentration	Basis
NAPHTHALENE	91-20-3	STEL	15 ppm	UY OEL
NAPHTHALENE	91-20-3	TWA	10 ppm	UY OEL
NAPHTHALENE	91-20-3	TWA	10 ppm	PY OEL
NAPHTHALENE	91-20-3	STEL	15 ppm	PY OEL
NAPHTHALENE	91-20-3	TWA	10 ppm	EC OEL
NAPHTHALENE	91-20-3	STEL	15 ppm	EC OEL
NAPHTHALENE	91-20-3	TWA	10 ppm	CR OEL
NAPHTHALENE	91-20-3	STEL	15 ppm	CR OEL

### US. ACGIH Threshold Limit Values

Components	CAS-No.	Value (Form of exposure)	Control parameters / Permissible concentration	Basis
NAPHTHALENE	91-20-3	TWA	10 ppm	ACGIH
NAPHTHALENE	91-20-3	STEL	15 ppm	ACGIH

### Biological occupational exposure limits - ACGIH

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Concentration	Basis
NAPHTHALENE	91-20-3	1-Naphthol, with hydrolysis + 2-Naphthol, with hydrolysis		EOS		ACGIH BEL

	Page: 7 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 000000130060 Version: 1.1
679710	

Remarks: Nonquantitative, Nonspecific

**Engineering measures** : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects).

**Personal protective equipment**

Eye protection : Safety glasses with side-shields

Hand protection : Wear resistant gloves such as:


Material : polyvinyl alcohol

Skin and body protection : Wear as appropriate:  
Safety shoes  
Flame-resistant clothing

Hygiene measures : Keep away from food, drink and animal feedingstuffs.  
When using do not eat, drink or smoke.  
Ensure that eyewash stations and safety showers are close to the workstation location.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance : liquid
- Odour : No data available
- pH : No data available
- Freezing point : No data available
- Boiling point : 185 °C Calculated Phase Transition Liquid/Gas
- Flash point : 42.2 °C Calculated Flash Point
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : 1.131 hPa Calculated Vapor Pressure
- Density : 0.820 g/cm<sup>3</sup> (20 °C)
- Solubility(ies)
- Water solubility : No data available
- Solubility in other solvents : No data available
- Partition coefficient: n-octanol/water : No data available
- Auto-ignition temperature : No data available
- Thermal decomposition : No data available

	Page: 8 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 000000130060 Version: 1.1
679710	

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## 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions : Stable under recommended storage conditions.

Hazardous polymerisation does not occur.  
Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : Aldehydes  
carbon dioxide and carbon monoxide

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## 11. TOXICOLOGICAL INFORMATION

### Product

Acute oral toxicity : No data available

Acute inhalation toxicity : No data available

Acute dermal toxicity : No data available

Skin corrosion/irritation : No data available

Serious eye damage/eye irritation : No data available

Respiratory or skin sensitisation : No data available

Aspiration toxicity : The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.


### Components:

#### **DISTILLATES, SWEETENED MIDDLE:**

Acute oral toxicity : LD 50 Rat: > 5,000 mg/kg

Aspiration toxicity : May be fatal if swallowed and enters airways.



	Page: 9 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 000000130060 Version: 1.1
679710	

**PETROLEUM NAPHTHA:**

Acute oral toxicity : LD 50 Rat: 3,000 mg/kg

Acute inhalation toxicity : LC 50 Rat: > 3,800 mg/m3  
Exposure time: 4 h

Acute dermal toxicity : LD 50 Rabbit: > 3,000 mg/kg

**NAPHTHALENE:**

Acute oral toxicity : LD50 Oral Rat: 2,200 mg/kg

Acute dermal toxicity : LD50 Dermal Rabbit: > 2.0 g/kg

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**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Product:**

No data available

**Components:**

**POLYETHER AMINE:**

**Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life.

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

**NAPHTHALENE:**


Toxicity to fish : LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss)): 0.91 - 2.82 mg/l  
Exposure time: 96 h  
Test Method: static test

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): 1.09 - 3.4 mg/l  
Exposure time: 48 h  
Test Method: static test

**Persistence and degradability**

**Product:**

No data available

	Page: 10 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 00000130060 Version: 1.1
679710	

**Components:**

**HYDROTREATED HEAVY NAPHTHA:**

Biodegradability : Not readily biodegradable.

**Bioaccumulative potential**

**Product:**

No data available

**Components:**

**NAPHTHALENE:**

Bioaccumulation : Species: Rainbow trout,donaldson trout (Oncorhynchus mykiss)  
Exposure time: 16 d  
Concentration: 0.023 mg/l  
Bioconcentration factor (BCF): 25  
Method: Flow through

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

**Mobility in soil**

**Product:**

No data available

**Components:**

**NAPHTHALENE:**

Surface tension : 31.8 mN/m

**Other adverse effects**

**Product:**

Ozone-Depletion Potential : No data available


**Components:**

No data available

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**13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

	Page: 11 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 000000130060 Version: 1.1
679710	

Waste from residues : Dispose of in accordance with the European Directives on waste and hazardous waste.

Do not contaminate ponds, waterways or ditches with chemical or used container.  
Container hazardous when empty.  
Dispose of in accordance with local 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.

**DISPOSAL CONSIDERATIONS**

Dispose of in accordance with local regulations.

**14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

UN 1993	Flammable liquid, n.o.s. (HYDROTREATED HEAVY NAPHTHA)	3		III	LIMITED QUANTITY
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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

UN 1993	Flammable liquid, n.o.s. (HYDROTREATED HEAVY NAPHTHA)	3		III	LIMITED QUANTITY
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**INTERNATIONAL MARITIME DANGEROUS GOODS**


UN 1993	FLAMMABLE LIQUID, N.O.S. (HYDROTREATED HEAVY NAPHTHA)	3		III	LIMITED QUANTITY
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**UN\_DG**

UN 1993	FLAMMABLE LIQUID, N.O.S. (HYDROTREATED HEAVY NAPHTHA)	3		III	LIMITED QUANTITY
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\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
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	Page: 12 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 000000130060 Version: 1.1
679710	

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.

## 15. REGULATORY INFORMATION

### Other international regulations

#### Notification status

US. Toxic Substances Control Act	: y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	: y (positive listing)
Australia. Industrial Chemical (Notification and Assessment) Act	: y (positive listing)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	: n (Negative listing)
Japan. Kashin-Hou Law List	: n (Negative listing)
Korea. Toxic Chemical Control Law (TCCL) List	: y (positive listing)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	: n (Negative listing)
China. Inventory of Existing Chemical Substances	: y (positive listing)

## 16. OTHER INFORMATION

### Further information

Other information : 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 MSDS has been prepared by Valvoline's Environmental Health and Safety Department.

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

	Page: 13 of 13
	Revision Date: 07/31/2016
<b>SAFETY DATA SHEET</b>	Print Date: 09/18/2019
Valvoline Professional Series SUPER CONCENTRATED FUEL INJECTOR CLEANER	MSDS Number: 000000130060 Version: 1.1
679710	

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