

Valvoline Professional Series™ COMPLETE  
FUEL SYS CLNR FUEL SYSTEM CLEANER  
679741

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone number	1-800-ASHLAND (1-800-274-5263)
Product name	Valvoline Professional Series™ COMPLETE FUEL SYS CLNR FUEL SYSTEM CLEANER	
Product code	679741	
Product Use Description	Industrial chemical	

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance: liquid

WARNING! COMBUSTIBLE LIQUID AND VAPOR. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. MAY CAUSE EYE IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION. MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE DERMATITIS AND BURNS.

#### Potential Health Effects

##### **Exposure routes**

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

##### **Eye contact**

Can cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

##### **Skin contact**

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Can cause skin irritation. Symptoms may include redness and burning of skin, and other skin damage. May cause allergic skin reaction. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, skin burns, and other skin damage.

**Ingestion**

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful. This material can get into the lungs during swallowing or vomiting. This results in lung inflammation and other lung injury.

**Inhalation**

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

**Aggravated Medical Condition**

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Skin, Upper respiratory tract, lung (for example, asthma-like conditions), Kidney, immune system, eye, urinary system, Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias., Individuals with erythrocyte glucose-6-phosphate dehydrogenase deficiency are particularly susceptible to hemolytic agents and rapidly develop hemolytic anemia from ingestion or inhalation of this material (or a component).

**Symptoms**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects), 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, confusion, blood abnormalities (breakage of red blood cells), kidney damage, lung damage, respiratory failure

**Target Organs**

This material (or a component) has been shown to lower activity of certain immune system cells in experimental animals. The significance of this effect with respect to human health is uncertain., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: mild, reversible liver effects, cataracts, anemia, nasal damage, eye damage,

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central nervous system damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans:; cataracts, eye damage

### **Carcinogenicity**

In a National Toxicology Program (NTP) study, lifetime inhalation exposure to naphthalene resulted in increases in tumors of the nose in rats. In a previous NTP study, lifetime exposure to naphthalene caused lung tumors in female mice. Male mice with the same exposure did not develop tumors. The relevance of this finding to humans is uncertain. Naphthalene is listed as carcinogenic by IARC (International Agency for Research on Cancer) and the National Toxicology Program (NTP).

### **Reproductive hazard**

This material (or a component) causes harm to the fetus.

### **Other information**

Infants are more sensitive than adults to the toxic effects of naphthalene. Diapers or cloths stored with mothballs and used directly on infants have caused skin rashes and illness. Naphthalene vapors from clothing or blankets that had been stored in or near the infant's room have caused illness and death.

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Hazardous Components</b>	<b>CAS-No. / Trade Secret No.</b>	<b>Concentration</b>
DISTILLATES, SWEETENED MIDDLE	64741-86-2	>=40-<50%
POLYETHER AMINE		>=30-<40%
HYDROTREATED HEAVY NAPHTHA	64742-48-9	>=15-<20%
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC	64742-94-5	>=1.5-<5%
NAPHTHALENE	91-20-3	>=0.1-<0.5%

## **4. FIRST AID MEASURES**

### **Eyes**

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

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### Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

### Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

### Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

### Notes to physician

**Hazards:** 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. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.

**Treatment:** No information available.

## 5. FIREFIGHTING MEASURES

### Suitable extinguishing media

Dry chemical, Carbon dioxide (CO<sub>2</sub>), Water spray

### Hazardous combustion products

Aldehydes, carbon, carbon dioxide and carbon monoxide, Hydrocarbons, nitrogen oxides (NO<sub>x</sub>), Sulphur oxides

### Precautions for fire-fighting

If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot

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lights, other flames and ignition sources at locations near the point of release. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively. Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning material with water used for cooling purposes.

**NFPA Flammable and Combustible Liquids Classification**

Combustible Liquid Class II

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions**

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Ensure adequate ventilation. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks). Pay attention to the spreading of gases especially at ground level (heavier than air) and to the direction of the wind.

**Environmental precautions**

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system. Local authorities should be advised if significant spillages cannot be contained.

**Methods for 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.

**7. HANDLING AND STORAGE****Handling**

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. Static ignition hazard can result from handling and use. Electrically bond and ground all

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containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77.

### Storage

Store in a cool, dry, ventilated area.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

#### General advice

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

#### Exposure controls

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.

#### 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 normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before reuse. If skin irritation develops, contact your facility health and safety professional or your local safety equipment supplier to determine the proper personal protective equipment for your use.

Wear resistant gloves (consult your safety equipment supplier).

Discard gloves that show tears, pinholes, or signs of wear.

#### Respiratory protection

Respiratory protection is not required under normal conditions of use.

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	liquid
<b>Boiling point/boiling range</b>	365 °F / 185 °C Calculated Phase Transition Liquid/Gas
<b>Flash point</b>	108.0 °F / 42.2 °C Calculated Flash Point
<b>Vapour pressure</b>	1.131 hPa Calculated Vapor Pressure
<b>Density</b>	0.870 g/cm <sup>3</sup> @ 68 °F / 20 °C

### 10. STABILITY AND REACTIVITY

**Stability**

Stable.

**Conditions to avoid**

excessive heat

**Incompatible products**

Strong oxidizing agents

**Hazardous decomposition products**

Aldehydes, carbon dioxide and carbon monoxide, Hydrocarbons

**Hazardous reactions**

Product will not undergo hazardous polymerization.

### 11. TOXICOLOGICAL INFORMATION

Information on likely  
routes of exposure

: Inhalation  
Skin absorption  
Skin contact

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Eye Contact  
Ingestion

### 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
- Target Organ Systemic Toxicant - Repeated exposure : Target Organs: This material (or a component) has been shown to lower activity of certain immune system cells in experimental animals. The significance of this effect with respect to human health is uncertain., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals:., mild, reversible liver effects, cataracts, anemia, nasal damage, eye damage, central nervous system damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans:., cataracts, eye damage

### Components:

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

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

#### **POLYETHER AMINE:**

Respiratory or skin : Classification: May cause sensitization by skin contact.



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### Persistence and degradability

**Product:**

no data available

**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:**

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Surface tension : 31.8 mN/m

### 13. DISPOSAL CONSIDERATIONS

#### Waste disposal methods

Dispose of in accordance with all applicable local, state and federal regulations.

### 14. TRANSPORT INFORMATION

#### REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
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#### U.S. DOT - ROAD

Not dangerous goods

#### U.S. DOT - RAIL

Not dangerous goods

#### U.S. DOT - INLAND WATERWAYS

Not dangerous goods

#### TRANSPORT CANADA - ROAD

Not dangerous goods

#### TRANSPORT CANADA - RAIL

Not dangerous goods

#### TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

#### INTERNATIONAL MARITIME DANGEROUS GOODS

UN	1993	FLAMMABLE LIQUID, N.O.S. (HYDROTREATED HEAVY NAPHTHA)	3	III	LIMITED QUANTITY
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### INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

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

UN	1993	Flammable liquid, n.o.s. (HYDROTREATED HEAVY NAPHTHA)	3	III
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### MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN	1993	LIQUIDO INFLAMABLE, N.E.P. (HYDROTREATED HEAVY NAPHTHA)	3	III
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\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

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

### California Prop. 65

WARNING! This product contains a chemical known to the State of California to cause cancer.	NAPHTHALENE BENZENE
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WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.	BENZENE
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### SARA Hazard Classification

### SARA 311/312 Classification

Fire Hazard

Acute Health Hazard

Chronic Health Hazard

### SARA 313 Component(s)

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NAPHTHALENE	0.20 %
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### New Jersey RTK Label Information

DISTILLATES, SWEETENED MIDDLE	64741-86-2
POLYETHER AMINE	
GASOLINE ADDITIVE	
HYDROTREATED HEAVY NAPHTHA	64742-48-9
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC	64742-94-5

### Pennsylvania RTK Label Information

DISTILLATES, SWEETENED MIDDLE	64741-86-2
POLYETHER AMINE	
GASOLINE ADDITIVE	
HYDROTREATED HEAVY NAPHTHA	64742-48-9
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC	64742-94-5

### 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)

### Reportable quantity - Product

US. EPA CERCLA Hazardous Substances (40 CFR 302)	48473 lbs
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### Reportable quantity-Components

NAPHTHALENE	91-20-3	100 lbs
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	HMIS	NFPA
Health	2*	1
Flammability	2	2
Physical hazards	0	
Instability		0
Specific Hazard	--	--

### 16. 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 Ashland's Environmental Health and Safety Department (1-800-325-3751).

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

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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