

VALVOLINE® PREMIUM  
STARTING FLUID  
602373

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION 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	1-800-ASHLAND (1-800-274-5263)

Product name	VALVOLINE® PREMIUM STARTING FLUID
Product code	602373
Product Use Description	No data

**2. HAZARDS IDENTIFICATION**

**Emergency Overview**

Appearance: aerosol,, colourless

WARNING! EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. CONTENTS UNDER PRESSURE. MAY AFFECT THE CENTRAL NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE IRRITATION. MAY CAUSE SKIN AND RESPIRATORY TRACT IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE DERMATITIS AND BURNS.

**Potential Health Effects**

**Routes of exposure**

Inhalation, Skin absorption, Skin contact, Eye Contact

**Eye contact**

May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

**Skin contact**

Can cause skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, and drying and cracking of skin, burns and other skin damage. Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

**Ingestion**

# ASHLAND

## SAFETY DATA SHEET

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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**

Breathing aerosol and/or mist is possible when material is sprayed. Aerosol and mist may present a greater risk of injury because more material may be present in the air than from vapor alone. 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, lung (for example, asthma-like conditions), auditory system, Individuals with preexisting heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

### **Symptoms**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), loss of appetite, Lack of coordination, irregular heartbeat, narcosis (dazed or sluggish feeling), high blood pressure, effects on heart rate, effects on breathing rate

### **Target Organs**

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: effects on hearing

### **Carcinogenicity**

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

### **Reproductive hazard**

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This material (or a component) has been shown to cause harm to the fetus in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Concentration
n-HEPTANE	142-82-5	>=60-<70%
ETHYL ETHER	60-29-7	>=20-<30%
CARBON DIOXIDE	124-38-9	>=1.5-<5%

### 4. FIRST AID MEASURES

#### Eyes

If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

#### 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 of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias.

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Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. 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. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

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

### Hazardous combustion products

carbon dioxide and carbon monoxide

### Precautions for fire-fighting

Material is volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, flames, sparks, heaters, smoking, electric motors, static discharge or other ignition sources at locations near the material handling point. 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).

### Flammability Class for Flammable Liquids

Flammable Liquid Class IA

## 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.

### Environmental precautions

Prevent run-off to sewers, streams or other bodies of water. If run-off occurs, notify proper authorities as required, that a spill has occurred.

### Methods for cleaning up

Absorb liquid on vermiculite, floor absorbent or other absorbent material.

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## 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. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing impervious protective gloves. As with all products of this nature, good personal hygiene is essential. Hands and other exposed areas should be washed thoroughly with soap and water after contact, especially before eating and/or smoking. Regular laundering of contaminated clothing is essential to reduce indirect skin contact with this material. **DO NOT** puncture or incinerate container.

### Storage

Do not store near extreme heat, open flame, or sources of ignition. Maximum recommended storage temperature 50 degrees C (122 degrees F). Store in a cool, dry, ventilated area.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

#### n-HEPTANE

142-82-5

ACGIH	time weighted average	400 ppm
ACGIH	Short term exposure limit	500 ppm
NIOSH	Recommended exposure limit (REL):	85 ppm
NIOSH	Recommended exposure limit (REL):	350 mg/m3
NIOSH	Ceiling Limit Value and Time Period (if specified):	440 ppm
NIOSH	Ceiling Limit Value and Time Period (if specified):	1,800 mg/m3
OSHA Z1	Permissible exposure limit	500 ppm
OSHA Z1	Permissible exposure limit	2,000 mg/m3
OSHA Z1A	time weighted average	400 ppm
OSHA Z1A	time weighted average	1,600 mg/m3
OSHA Z1A	Short term exposure limit	500 ppm
OSHA Z1A	Short term exposure limit	2,000 mg/m3
US CA OEL	Time Weighted Average (TWA)	400 ppm
	Permissible Exposure Limit (PEL):	
US CA OEL	Time Weighted Average (TWA)	1,600 mg/m3
	Permissible Exposure Limit (PEL):	

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US CA OEL	Short term exposure limit	500 ppm
US CA OEL	Short term exposure limit	2,000 mg/m3
ACGIH	time weighted average	400 ppm
ACGIH	Short term exposure limit	500 ppm

**ETHYL ETHER** **60-29-7**

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ACGIH	time weighted average	400 ppm
ACGIH	Short term exposure limit	500 ppm
OSHA Z1	Permissible exposure limit	400 ppm
OSHA Z1	Permissible exposure limit	1,200 mg/m3

**CARBON DIOXIDE** **124-38-9**

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ACGIH	time weighted average	5,000 ppm
ACGIH	Short term exposure limit	30,000 ppm
NIOSH	Recommended exposure limit (REL):	5,000 ppm
NIOSH	Recommended exposure limit (REL):	9,000 mg/m3
NIOSH	Short term exposure limit	30,000 ppm
NIOSH	Short term exposure limit	54,000 mg/m3
OSHA Z1	Permissible exposure limit	5,000 ppm
OSHA Z1	Permissible exposure limit	9,000 mg/m3

**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 resistant gloves (consult your safety equipment supplier).

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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.

#### Respiratory protection

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.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	aerosol
Form	aerosol
Colour	colourless
Odour	ether-like
Boiling point/boiling range	34.60 °C / 94.3 °F @ 1,013.23 hPa
pH	No data
Flash point	-49 °F / -45 °C
Evaporation rate	No data
Explosion limits	1.05 %(V) 36.5 %(V)
Vapour pressure	717.26 hPa @ 77 °F / 25 °C
Vapour density	No data
Density	0.706 g/cm <sup>3</sup> @ 60.01 °F / 15.56 °C
	No data
Solubility	No data
Partition coefficient: n-octanol/water	No data
log Pow	no data available
Autoignition temperature	No data

### 10. STABILITY AND REACTIVITY

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**Stability**

Stable.

**Conditions to avoid**

Avoid heat, open flame, and prolonged storage at elevated temperatures.

**Incompatible products**

strong oxidizing agents

**Hazardous decomposition products**

carbon dioxide and carbon monoxide, various hydrocarbons

**Hazardous reactions**

Product will not undergo hazardous polymerization.

**Thermal decomposition**

No data

**11. TOXICOLOGICAL INFORMATION**

**Acute oral toxicity**

n-HEPTANE	LD 50 Rat: > 15,000 mg/kg
ETHYL ETHER	LD 50 Rat: 3,230 - 3,920 mg/kg
CARBON DIOXIDE	no data available

**Acute inhalation toxicity**

n-HEPTANE	LC 50 Rat: 103 g/m <sup>3</sup> , 4 h
ETHYL ETHER	LC 50 Rat: 32000 ppm, 4 h
CARBON DIOXIDE	no data available

**Acute dermal toxicity**

n-HEPTANE	LD 50 Rabbit: > 2,001 mg/kg
ETHYL ETHER	no data available
CARBON DIOXIDE	no data available

**12. ECOLOGICAL INFORMATION**

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**Aquatic toxicity**

**Acute and Prolonged Toxicity to Fish**

No data

**Acute Toxicity to Aquatic Invertebrates**

No data

**Environmental fate and pathways**

No data

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods**

Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

**14. TRANSPORT INFORMATION**

**IMDG:**

UN1950, AEROSOLS 2.1,

**IATA\_P:**

UN1950, Aerosols, flammable 2.1,

**IATA\_C:**

UN1950, Aerosols, flammable 2.1,

**CFR\_ROAD:**

UN1950, Aerosols 2.1,

**CFR\_RAIL:**

UN1950, Aerosols 2.1,

**CFR\_INWTR:**

UN1950, Aerosols 2.1,

Dangerous goods descriptions (if indicated above) may not reflect package size, quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

