

Pyroil™ REGULAR STARTING FLUID  
PYSFR11

### 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 Pyroil™ REGULAR STARTING FLUID

Product code PYSFR11

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Appearance: aerosol, aerosol

DANGER! 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. PROLONGED OR REPEATED CONTACT MAY DRY THE SKIN AND CAUSE IRRITATION AND BURNS.

#### Potential Health Effects

##### **Exposure routes**

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

##### **Eye contact**

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

##### **Skin contact**

May cause slight skin irritation. 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**

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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), Liver, Central nervous system, male reproductive system, Individuals with preexisting heart disorders maybe 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), Cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), loss of appetite, respiratory depression (slowing of the breathingrate), Lack of coordination, confusion, irregular heartbeat, respiratory failure, coma

### **Target Organs**

This product contains ethanol. Alcoholic beverage consumption has been associated with brain damage, heart damage, and pancreatitis in humans. The relevance of these findings to ethanol exposure in industrial environments is uncertain., Exposure to this material (or a component) has been found to cause kidney damage in male rats. The mechanism by which this toxicity occurs is specific to the male rat and the kidney effects are not expected to occur in humans., Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: pancreatic damage, liver damage, brain damage, testis damage, Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: liver damage

### **Carcinogenicity**

This product contains ethanol. The International Agency for Research on Cancer (IARC) has determined that exposure to ethanol through chronic human consumption of alcoholic beverages can cause cancer. The relevance of this finding to ethanol exposure in industrial environments is uncertain.

### **Reproductive hazard**

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This product contains ethanol. Alcoholic beverage consumption has been associated with birth defects in humans. The relevance of this finding to ethanol exposure in industrial environments is uncertain.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components	CAS-No. / Trade Secret No.	Concentration
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	>=70-<80%
ETHYL ETHER	60-29-7	>=15-<20%
CARBON DIOXIDE	124-38-9	>=1.5-<5%
ETHANOL	64-17-5	>=1-<1.5%
ETHYL CHLORIDE	75-00-3	>=0.5-<1%
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-53-6	>=0.5-<1%

### 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.

#### Skin

Remove contaminated clothing. Wash exposed area with soap and water. If 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

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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. 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. 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.

**Treatment:** Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.

## 5. FIREFIGHTING MEASURES

### Suitable extinguishing media

Water spray

### Hazardous combustion products

Aldehydes, carbon dioxide and carbon monoxide, formaldehyde-like, Hydrocarbons, organic compounds

### Precautions for fire-fighting

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

not applicable

## 6. ACCIDENTAL RELEASE MEASURES

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### 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

Do not flush into surface water or sanitary sewer system.

### Methods for cleaning up

No data

### Other information

Comply with all applicable federal, state, and local regulations.

## 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.

### Storage

Do not store near extreme heat, open flame, or sources of ignition. Store in a cool, dry, ventilated area.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

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<b>SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC</b>	<b>64742-89-8</b>
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OSHA Z1	time weighted average	500 ppm
ACGIH	time weighted average	300 ppm
OSHA Z1	time weighted average	2,000 mg/m3
ACGIH	time weighted average	1,370 mg/m3

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<b>ETHYL ETHER</b>	<b>60-29-7</b>
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ACGIH	time weighted average	400 ppm
ACGIH	Short term exposure limit	500 ppm

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OSHA Z1	Permissible exposure limit	400 ppm
OSHA Z1	Permissible exposure limit	1,200 mg/m3
<b>CARBON DIOXIDE</b>		<b>124-38-9</b>
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
<b>ETHANOL</b>		<b>64-17-5</b>
NIOSH	Recommended exposure limit (REL):	1,000 ppm
NIOSH	Recommended exposure limit (REL):	1,900 mg/m3
OSHA Z1	Permissible exposure limit	1,000 ppm
OSHA Z1	Permissible exposure limit	1,900 mg/m3
ACGIH	Short term exposure limit	1,000 ppm

### 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. Maintain eye wash station near work area.

### 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.

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Wear resistant gloves (consult your safety equipment supplier).

### 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

<b>Physical state</b>	aerosol
<b>Form</b>	aerosol
<b>Boiling point/boiling range</b>	94.3 °F / 34.6 °C @ 1,013.23 hPa Calculated Phase Transition Liquid/Gas
<b>Flash point</b>	-49 °F / -45 °C Calculated Flash Point
<b>Lower explosion limit/Upper explosion limit</b>	1.05 %(V) / 36.5 %(V)
<b>Vapour pressure</b>	717.261 hPa @ 77 °F / 25 °C Calculated Vapor Pressure
<b>Density</b>	0.7114 g/cm <sup>3</sup> @ 60.01 °F / 15.56 °C

## 10. STABILITY AND REACTIVITY

### Stability

Stable.

### Conditions to avoid

Heat, flames and sparks.

### Incompatible products

Acids, Alkali metals, Ammonia, Bases, halogens, Oxidizing agents, sodium, Sulphur compounds

### Hazardous decomposition products

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Aldehydes, carbon dioxide and carbon monoxide, formaldehyde-like, Hydrocarbons, organic compounds

### Hazardous reactions

Product will not undergo hazardous polymerization.

## 11. TOXICOLOGICAL INFORMATION

### Acute oral toxicity

Acute oral toxicity - : no data available  
Product

### Acute oral toxicity - Components

SOLVENT NAPHTHA : LD 50: > 8,000 mg/kg Species: Rat  
(PETROLEUM), LIGHT  
ALIPHATIC

ETHYL ETHER : LD 50: 3,230 - 3,920 mg/kg Species: Rat

ETHANOL : LD 50: 7,060 mg/kg Species: Rat

DISTILLATES : LD 50: > 5 g/kg Species: Rat  
(PETROLEUM),  
HYDROTREATED  
LIGHT NAPHTHENIC

### Acute inhalation toxicity

Acute inhalation toxicity - : no data available  
Product

### Acute inhalation toxicity - Components

SOLVENT NAPHTHA : LC 50: 3400 ppm Exposure time: 4 h Species: Rat  
(PETROLEUM), LIGHT  
ALIPHATIC

ETHYL ETHER : LC 50: 32,000 mg/l Exposure time: 4 h Species: Rat

ETHANOL : LC 50: 117 - 125 mg/l Exposure time: 4 h Species: Rat

### Acute dermal toxicity



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Acute dermal toxicity - Product : no data available

#### Acute dermal toxicity - Components

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : LD 50: > 4,000 mg/kg Species: Rat

ETHANOL : LD Lo: 20 g/kg Species: Rabbit

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC : LD 50: > 2,000 mg/kg Species: Rabbit

#### Acute toxicity (other routes of administration)

Acute toxicity (other routes of administration) : no data available

## 12. ECOLOGICAL INFORMATION

#### Biodegradability

Biodegradability - Product : no data available

#### Bioaccumulation

Bioaccumulation - Product : no data available

#### Ecotoxicity effects

##### Toxicity to fish

Toxicity to fish - Product : no data available

##### Toxicity to fish - Components

ETHANOL : LC 50: 12,000 - 16,000 mg/l  
Exposure time: 96 h  
Species: Rainbow trout,donaldson trout (Oncorhynchus mykiss)  
Test Type: static test

#### Toxicity to daphnia and other aquatic invertebrates

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Toxicity to daphnia and other aquatic invertebrates - Product : no data available

Toxicity to daphnia and other aquatic invertebrates - Components  
ETHANOL : EC 50: > 10,000 mg/l  
Exposure time: 48 h  
Species: Water flea (Daphnia magna)  
Test Type: static test

**Toxicity to algae**

Toxicity to algae - Product : no data available

**Toxicity to bacteria**

Toxicity to bacteria - Product : no data available

**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**

ORM-D, CONSUMER COMMODITY	ORM
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**U.S. DOT - RAIL**

ORM-D, CONSUMER COMMODITY	ORM
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**U.S. DOT - INLAND WATERWAYS**

ORM-D, CONSUMER COMMODITY	ORM
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**TRANSPORT CANADA - ROAD**

UN 1950 AEROSOLS	2.1
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**TRANSPORT CANADA - RAIL**

UN 1950 AEROSOLS	2.1
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**TRANSPORT CANADA - INLAND WATERWAYS**

UN 1950 AEROSOLS	2.1
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**INTERNATIONAL MARITIME DANGEROUS GOODS**

UN 1950 AEROSOLS	2.1	LIMITED QUANTITY
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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

UN 1950 Aerosols, flammable (engine starting fluid)	2.1
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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

UN 1950 Aerosols, flammable (engine starting fluid)	2.1
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**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

UN 1950 AEROSOLS	2
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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**

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### California Prop. 65

WARNING! This product contains a chemical known to the State of California to cause cancer.	ETHYL CHLORIDE BENZENE
WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.	TOLUENE BENZENE

### SARA Hazard Classification

#### SARA 311/312 Classification

Acute Health Hazard
Fire Hazard
Sudden Release of Pressure Hazard
Chronic Health Hazard

### SARA 313 Component(s)

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### New Jersey RTK Label Information

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8
ETHYL ETHER	60-29-7
CARBON DIOXIDE	124-38-9
ETHANOL	64-17-5
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-53-6
TOLUENE	108-88-3

#### Pennsylvania RTK Label Information

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8
ETHYL ETHER	60-29-7
CARBON DIOXIDE	124-38-9
ETHANOL	64-17-5

#### 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	y (positive listing)

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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	y (positive listing)
China. Inventory of Existing Chemical Substances	y (positive listing)

### Reportable quantity - Product

US. EPA CERCLA Hazardous Substances (40 CFR 302)	511 lbs
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### Reportable quantity-Components

ETHYL ETHER	60-29-7	100 lbs
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	HMIS	NFPA
Health	2	1
Flammability	4	4
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).