

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	1-800-ASHLAND (1-800-274-5263)
Product name	PYROIL® REGULAR STARTING FLUID	
Product code	PYSFR11	
Product Use Description	No data	

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Appearance: aerosol

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. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. 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

#### **Eye contact**

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

#### **Skin contact**

May cause mild skin irritation. Prolonged or repeated contact may dry the skin. Symptoms may include redness, burning, drying and cracking of skin, and skin burns. 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.

PYROIL® REGULAR STARTING FLUID  
PYSFR11

### **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**

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)

### **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), high blood pressure, effects on heart rate, effects on breathing rate

### **Target Organs**

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.

### **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**

There are no data available for assessing risk to the fetus from maternal exposure to this material.

<b>3. COMPOSITION/INFORMATION ON INGREDIENTS</b>
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PYROIL® REGULAR STARTING FLUID  
PYSFR11

Hazardous Components	CAS-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%

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

**Treatment:** No information available.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Water mist, Carbon dioxide (CO2), Dry chemical

PYROIL® REGULAR STARTING FLUID  
PYSFR11

**Hazardous combustion products**

Aldehydes, carbon dioxide and carbon monoxide, organic compounds, Hydrocarbons

**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).

**NFPA Flammable and Combustible Liquids Classification**

Flammable Liquid Class IA

<b>6. ACCIDENTAL RELEASE MEASURES</b>
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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. Eliminate all ignition sources (flares, flames including pilot lights, electrical sparks).

**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.

<b>7. HANDLING AND STORAGE</b>
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**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. Static ignition hazard can result from handling and use. Electrically bond and ground all containers, personnel and equipment before transfer or use of material. Special precautions may be necessary to dissipate static electricity for non-

**PYROIL® REGULAR STARTING FLUID  
PYSFR11**

conductive containers. Use proper bonding and grounding during product transfer as described in National Fire Protection Association document NFPA 77. Hydrocarbon solvents are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering or pumping at high flow rates. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids.

**Storage**

Do not store near extreme heat, open flame, or sources of ignition.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC 64742-89-8

OSHA Z1	time weighted average	500 ppm
ACGIH	time weighted average	300 ppm
ACGIH	time weighted average	1,370 mg/m3
ETHYL ETHER		60-29-7
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
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

**PYROIL® REGULAR STARTING FLUID**  
**PYSFR11**

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).

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**

<b>Physical state</b>	aerosol
<b>Form</b>	aerosol
<b>Colour</b>	No data
<b>Odour</b>	No data
<b>Boiling point/boiling range</b>	34.60 °C @ 1,013.23 hPa Calculated Phase Transition Liquid/Gas
<b>pH</b>	No data
<b>Flash point</b>	-45.00 °C Calculated Flash Point
<b>Evaporation rate</b>	No data
<b>Lower explosion limit/Upper explosion limit</b>	1.05 %(V) / 36.5 %(V)

PYROIL® REGULAR STARTING FLUID  
PYSFR11

<b>Vapour pressure</b>	717.261 hPa @ 25 °C Calculated Vapor Pressure
<b>Vapour density</b>	No data
<b>Density</b>	0.7114 g/cm3 @ 60.01 °F / 15.56 °C
<b>Solubility</b>	No data
<b>Partition coefficient: n-octanol/water</b>	No data
<b>log Pow</b>	no data available
<b>Autoignition temperature</b>	No data

## 10. STABILITY AND REACTIVITY

### Stability

Stable.

### Conditions to avoid

Heat, flames and sparks.

### Incompatible products

halogens, Strong oxidizing agents

### Hazardous decomposition products

Aldehydes, carbon dioxide and carbon monoxide, organic compounds, Hydrocarbons

### Hazardous reactions

Product will not undergo hazardous polymerization.

### Thermal decomposition

No data

## 11. TOXICOLOGICAL INFORMATION

### Acute oral toxicity

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	: LD 50 Rat: > 8,000 mg/kg
ETHYL ETHER	: LD 50 Rat: 3,230 - 3,920 mg/kg
CARBON DIOXIDE	: no data available

### Acute inhalation toxicity

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	: LC 50 Rat: 3400 ppm, 4 h
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**PYROIL® REGULAR STARTING FLUID  
PYSFR11**

ETHYL ETHER : LC 50  
Rat: 32,000 mg/l, 4 h  
CARBON DIOXIDE : no data available

**Acute dermal toxicity**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : LD 50  
Rat:  
> 4,000 mg/kg  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

<b>12. ECOLOGICAL INFORMATION</b>
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**Biodegradability**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

**Bioaccumulation**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

**Ecotoxicity effects**

**Toxicity to fish**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

**Toxicity to daphnia and other aquatic invertebrates.**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

**Toxicity to algae**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

**Toxicity to bacteria**



**PYROIL® REGULAR STARTING FLUID  
PYSFR11**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

**Biochemical Oxygen Demand (BOD)**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

**Chemical Oxygen Demand (COD)**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

**Additional ecological information**

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC : no data available  
ETHYL ETHER : no data available  
CARBON DIOXIDE : no data available

**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****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**

PYROIL® REGULAR STARTING FLUID  
PYSFR11

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****California Prop. 65**

PYROIL® REGULAR STARTING FLUID  
PYSFR11

WARNING! This product contains a chemical known in the State of California to cause cancer. BENZENE

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

**SARA Hazard Classification**

Acute Health Hazard

Fire Hazard

Sudden Release of Pressure Hazard

**New Jersey RTK Label Information**

n-HEPTANE	142-82-5
ETHYL ETHER	60-29-7
CARBON DIOXIDE	124-38-9

**Pennsylvania RTK Label Information**

n-HEPTANE	142-82-5
ETHYL ETHER	60-29-7
CARBON DIOXIDE	124-38-9
BENZENE	71-43-2

**Notification status**

EU. EINECS	y (positive listing)
US. Toxic Substances Control Act	y (positive listing)
Australia. Industrial Chemical (Notification and Assessment) Act	y (positive listing)
Canada. Canadian Environmental Protection Act (CEPA).	y (positive listing)
Domestic Substances List (DSL). (Can. Gaz. Part II, Vol. 133)	
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)
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand	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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PYROIL® REGULAR STARTING FLUID  
PYSFR11

	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).