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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Material Identity
Product Name: PYROIL REGULAR STARTING FLUID 12/7.5 OZ
General or Generic ID: SOLVENT BLEND

Company
The Valvoline Company
P.O. Box 14000
Lexington, KY 40512

Telephone Numbers
Emergency: 1-800-274-5263
Information: 1-859-357-7206

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient(s)	CAS Number	% (by weight)
HEPTANE	142-82-5	69.0- 79.0
ETHYL ETHER	60-29-7	11.0- 21.0
CARBON DIOXIDE	124-38-9	1.0- 11.0
HEXANE	110-54-3	2.8- 2.8

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3. HAZARDS IDENTIFICATION

Potential Health Effects

Eye
May cause mild eye irritation.

Skin
Can cause skin irritation. Prolonged or repeated contact may dry and crack the skin. 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.

Swallowing
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 usually occur at air concentrations higher than the recommended exposure limits (See Section 8).

Symptoms of Exposure
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, loss of coordination irregular heartbeat, narcosis (dazed or sluggish feeling).

Target Organ Effects
testis damage, lung damage, visual impairment, central nervous system effects.

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

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

Other Health Effects
No data

Primary Route(s) of Entry
Inhalation, Skin absorption, Skin contact, Eye contact.

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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.

Swallowing
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.

Note to Physicians
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 3 - Swallowing) when deciding whether to induce vomiting. Preexisting

disorders of the following organs (or organ systems) may be aggravated by exposure to this material: skin, lung (for example, asthma-like conditions), Individuals with pre-existing heart disorders may be more susceptible to arrhythmias (irregular heartbeats) if exposed to high concentrations of this material.

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5. FIRE FIGHTING MEASURES

Flash Point
Not applicable

Explosive Limit
(for component) Lower 1.0 %

Autoignition Temperature
No data

Hazardous Products of Combustion
May form:

Fire and Explosion Hazards
Material is highly volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Extinguishing Media
No data

Fire Fighting Instructions
Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS.

NFPA Rating
Health - 1, Flammability - 4, Reactivity - 0

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6. ACCIDENTAL RELEASE MEASURES

Small Spill
Eliminate all sources of ignition such as flares, flames (including pilot lights), and electrical sparks. Absorb liquid on vermiculite, floor absorbent or other absorbent material. Persons not wearing proper personal protective equipment should be excluded from area of spill.

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

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. All five gallon pails and larger metal containers including tank cars and tank trucks should be grounded and/or bonded when material is transferred. Precautions during use: avoid prolonged or frequently repeated skin contact with this material. Skin contact can be mininized 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. 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

Eye Protection

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses. Consult your safety representative.

Skin Protection

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

Respiratory Protections

If workplace exposure limit(s) of product or any component is exceeded (See Exposure Guidelines), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (consult your industrial hygienist). Engineering or administrative controls should be implemented to reduce exposure.

Engineering Controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV(s).

Exposure Guidelines

Component

HEPTANE (142-82-5)
OSHA VPEL 400.000 ppm - TWA
OSHA VPEL 1600.000 mg/m3 - TWA
OSHA VPEL 500.000 ppm - STEL

OSHA VPEL 2000.000 mg/m3 - STEL
ACGIH TLV 400.000 ppm - TWA
ACGIH TLV 1640.000 mg/m3 - TWA
ACGIH TLV 2050.000 mg/m3 - STEL
ACGIH TLV 500.000 ppm - STEL

ETHYL ETHER (60-29-7)
No exposure limits established

CARBON DIOXIDE (124-38-9)
OSHA VPEL 10000.000 ppm - TWA
OSHA VPEL 18000.000 mg/m3 - TWA
OSHA VPEL 30000.000 ppm - STEL
OSHA VPEL 54000.000 mg/m3 - STEL
ACGIH TLV 9000.000 mg/m3 - TWA
ACGIH TLV 5000.000 ppm - TWA
ACGIH TLV 30000.000 ppm - STEL
ACGIH TLV 54000.000 mg/m3 - STEL

HEXANE (110-54-3)
No exposure limits established

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9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point
(for component) 94.0 F (34.4 C)

Vapor Pressure
(for component) 439.000 mmHg

Specific Vapor Density
> 1.000 @ AIR=1

Specific Gravity
.773 @ 77.00 F

Liquid Density
5.800 lbs/gal @ 77.00 F
.773 kg/l @ 25.00 C

Percent Volatiles (Including Water)
No data

Evaporation Rate
SLOWER THAN ETHYL ETHER

Appearance
No data

State
LIQUID

Physical Form
No data

Color
CLEAR

Odor
No data

pH
No data

Flame Propagation
> 18.000 in

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10. STABILITY AND REACTIVITY

Hazardous Polymerization
Product will not undergo hazardous polymerization.

Hazardous Decomposition
May form: carbon dioxide and carbon monoxide, various hydrocarbons.

Chemical Stability
Stable.

Incompatibility
Avoid contact with: aldehydes, alkanol amines, amines, ammonia, chlorinated solvents, oxygen, strong bases, strong oxidizing agents.

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11. TOXICOLOGICAL INFORMATION

No data

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12. ECOLOGICAL INFORMATION

No data

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13. DISPOSAL CONSIDERATION

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

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14. TRANSPORT INFORMATION

DOT Information - 49 CFR 172.101
DOT Description:
CONSUMER COMMODITY,ORM-D

Container/Mode:
CASES/SURFACE - ORM-D EXCEPTION

NOS Component:
None

RQ (Reportable Quantity) - 49 CFR 172.101

Product Quantity (lbs)	Component

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15. REGULATORY INFORMATION

US Federal Regulations

CERCLA RQ - 40 CFR 302.4

None

SARA 302 Components - 40 CFR 355 Appendix A

None

Section 311/312 Hazard Class - 40 CFR 370.2

Immediate(X) Delayed(X) Fire(X) Reactive( ) Sudden Release of Pressure( )

SARA 313 Components - 40 CFR 372.65

None

International Regulations

Inventory Status

Not determined

State and Local Regulations

California Proposition 65

None

New Jersey RTK Label Information

N-HEPTANE	142-82-5
CARBON DIOXIDE	124-38-9

Pennsylvania RTK Label Information

HEPTANE (N-)	142-82-5
CARBON DIOXIDE	124-38-9

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.

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