

# Refrigeration Fluid

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations  
Revision Date: 01/20/2016 Date of issue: 01/20/2016

Version: 1.1

### SECTION 1: IDENTIFICATION

#### Product Identifier

**Product Name:** Refrigeration Fluid

**Synonyms:** RF150A, RF 200A

#### Intended Use of the Product

Refrigeration fluid

#### Name, Address, and Telephone of the Responsible Party

##### **Company**

Soltex Inc. (Synthetic Oils & Lubricants of Texas)

3707 FM 1960 W Ste. 560

Houston, TX 77068

(281)-587-0900

[soltexinc.com](http://soltexinc.com)

#### Emergency Telephone Number

**Emergency Number** : (800)-424-9300 (CHEMTREC); (281)-587-0900 (Other Safety Information)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

##### **Classification (GHS-US)**

Not a hazardous substance or mixture according to OSHA HCS 2012

#### Label Elements

##### **GHS-US Labeling**

**Hazard Pictograms (GHS-US)** : None

**Signal Word (GHS-US)** : None

**Hazard Statements (GHS-US)** : H401 - Toxic to aquatic life.  
H413 - May cause long lasting harmful effects to aquatic life.

**Precautionary Statements (GHS-US)** : P273 - Avoid release to the environment.  
P301+P310 - If swallowed: Immediately call a POISON CENTER/doctor.  
P331 - Do NOT induce vomiting.  
P501 - Dispose of contents/container according to local, regional, national, and international regulations.

#### Other Hazards

Persons with pre-existing neuromuscular disorders may be at increased risk of neurotoxic effects from Triphenyl phosphate.

**Unknown Acute Toxicity (GHS-US)** Not available

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Benzene, mono-C10-13-alkyl derivatives, distillation residues	(CAS No) 84961-70-6	25 to 30, 30 to 60, or 60 to 85	
Benzene, polypropene derivatives	(CAS No) 68081-77-6	15 to 30, 30 to 60, or 60 to 80	Aquatic Chronic 4, H413
tert-Butylphenyl diphenyl phosphate	(CAS No) 56803-37-3	0.1 to 1 or 1 to 5	Acute Tox. 4 (Inhalation:vapor), H332 Aquatic Acute 1, H400
Triphenyl phosphate	(CAS No) 115-86-6	0.1 - 1	Aquatic Acute 1, H400 Aquatic Chronic 2, H411

More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition. Full text of H-phrases: see section 16

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### SECTION 4: FIRST AID MEASURES

#### Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Ingestion:** DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

#### Most Important Symptoms and Effects Both Acute and Delayed

**General:** May be harmful if swallowed and enters airways.

**Inhalation:** May cause respiratory irritation.

**Skin Contact:** May cause skin irritation.

**Eye Contact:** May cause eye irritation.

**Ingestion:** May be harmful if swallowed and enters airways.

**Chronic Symptoms:** None expected under normal conditions of use.

#### Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

### SECTION 5: FIRE-FIGHTING MEASURES

#### Extinguishing Media

**Suitable Extinguishing Media:** Water spray, fog, carbon dioxide, foam, dry chemical.

**Unsuitable Extinguishing Media:** Use of heavy stream of water may spread fire.

#### Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable but will support combustion.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

#### Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Carbon oxides (CO, CO<sub>2</sub>). Unidentified organic compounds. Phosphorus oxides.

**Other Information:** Do not allow run-off from fire fighting to enter drains or water courses.

#### Reference to Other Sections

Refer to section 9 for flammability properties.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid breathing (vapor, mist, spray). Avoid all contact with skin, eyes, or clothing.

#### For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area.

#### Environmental Precautions

Prevent entry to sewers and public waters. Contact competent authorities after a spill.

#### Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

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**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely.

### Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

### Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

**Specific End Use(s)** Refrigeration fluid

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Triphenyl phosphate (115-86-6)		
Mexico	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Mexico	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	1000 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
British Columbia	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Manitoba	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Nova Scotia	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Nunavut	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
Nunavut	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Ontario	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Prince Edward Island	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Québec	VEMP (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
Saskatchewan	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>
Yukon	OEL STEL (mg/m <sup>3</sup> )	6 mg/m <sup>3</sup>
Yukon	OEL TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup>

### Exposure Controls

**Appropriate Engineering Controls:** Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Avoid all unnecessary exposure.

**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear chemically resistant protective gloves.

**Eye Protection:** Chemical goggles or safety glasses.

**Skin and Body Protection:** Wash contaminated clothing before reuse.

**Respiratory Protection:** Wear respiratory protection.

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

Physical State : Liquid

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<b>Appearance</b>	: Clear yellow liquid
<b>Color, D1500</b>	: 1.50
<b>Odor</b>	: Not available
<b>Odor Threshold</b>	: Not available
<b>pH</b>	: Not available
<b>Evaporation Rate</b>	: Not available
<b>Freezing/Melting Point</b>	: Not available
<b>Boiling Point</b>	: Not available
<b>Flash Point</b>	: > 175 °C (> 347 °F) Cleveland open-cup
<b>Auto-ignition Temperature</b>	: Not available
<b>Decomposition Temperature</b>	: Not available
<b>Flammability (solid, gas)</b>	: Not available
<b>Upper /Lower Flammable Limit</b>	: Not available
<b>Vapor Pressure</b>	: Not available
<b>Relative Vapor Density at 20 °C</b>	: Not available
<b>Specific Gravity, 15.6°C/15.6°C</b>	: 0.86 – 0.87
<b>Solubility</b>	: Not available
<b>Partition Coefficient: N-octanol/water</b>	: Not available
<b>Viscosity</b>	: Not available
<b>Viscosity, Kinematic</b>	: 29 - 48 cSt @ 40 °C/104 °F
<b>Explosion Data – Sensitivity to Mechanical Impact</b>	: Not expected to present an explosion hazard due to mechanical impact.
<b>Explosion Data – Sensitivity to Static Discharge</b>	: Not expected to present an explosion hazard due to static discharge.

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Hazardous reactions will not occur under normal conditions.

**Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). Phosphorus oxides. Toxic fumes.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects - Product

**Acute Toxicity:** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Not classified

**Serious Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not available

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** May cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause eye irritation.

**Symptoms/Injuries After Ingestion:** May be harmful if swallowed and enters airways. **Chronic Symptoms:** None expected under normal conditions of use.

#### Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

<b>Triphenyl phosphate (115-86-6)</b>	
<b>LD50 Oral Rat</b>	3500 mg/kg
<b>LD50 Dermal Rabbit</b>	> 7900 mg/kg

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<b>tert-Butylphenyl diphenyl phosphate (56803-37-3)</b>	
<b>ATE US (vapors)</b>	11.00 mg/l/4h

### SECTION 12: ECOLOGICAL INFORMATION

#### Toxicity

**Ecology - General:** Toxic to aquatic life.

<b>Triphenyl phosphate (115-86-6)</b>	
<b>LC50 Fish 1</b>	0.28 - 0.5 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
<b>EC50 Daphnia 1</b>	0.86 - 1.2 mg/l (Exposure time: 48 h - Species: Daphnia magna)
<b>LC 50 Fish 2</b>	0.81 - 0.94 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

**Persistence and Degradability** Not established

#### Bioaccumulative Potential

<b>Refrigeration Fluid</b>	
<b>Bioaccumulative Potential</b>	Not established.
<b>Triphenyl phosphate (115-86-6)</b>	
<b>BCF Fish 1</b>	84 - 193
<b>Log Pow</b>	4.59

**Mobility in Soil** Not available

#### Other Adverse Effects

**Other Information:** Avoid release to the environment.

### SECTION 13: DISPOSAL CONSIDERATIONS

**Sewage Disposal Recommendations:** This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

### SECTION 14: TRANSPORT INFORMATION

**In Accordance with DOT** Not regulated for transport

**In Accordance with IMDG** Not regulated for transport

**In Accordance with IATA** Not regulated for transport

**In Accordance with TDG** Not regulated for transport

### SECTION 15: REGULATORY INFORMATION

#### US Federal Regulations

<b>Refrigeration Fluid</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard
<b>Benzene, mono-C10-13-alkyl derivatives, distillation residues (84961-70-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Benzene, polypropene derivatives (68081-77-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Triphenyl phosphate (115-86-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>tert-Butylphenyl diphenyl phosphate (56803-37-3)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

#### US State Regulations

<b>Triphenyl phosphate (115-86-6)</b>	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	

#### Canadian Regulations

<b>Refrigeration Fluid</b>	
<b>WHMIS Classification</b>	Uncontrolled product according to WHMIS classification criteria

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<b>Benzene, mono-C10-13-alkyl derivatives, distillation residues (84961-70-6)</b>	
Listed on the Canadian NDSL (Non-Domestic Substances List)	
<b>Benzene, polypropene derivatives (68081-77-6)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
<b>Triphenyl phosphate (115-86-6)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
<b>tert-Butylphenyl diphenyl phosphate (56803-37-3)</b>	
Listed on the Canadian DSL (Domestic Substances List)	

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

### International Regulations

<b>Benzene, Mono-c10-13-alkyl Derivatives, Distillation Residues (84961-70-6)</b>	
Listed on the AICS (Australian Inventory of Chemical Substances)	
Listed on the Canadian NDSL (Non-Domestic Substances List)	
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Benzene, Polypropene Derivatives (68081-77-6)</b>	
Listed on the AICS (Australian Inventory of Chemical Substances)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)	
Listed on the Korean ECL (Existing Chemicals List)	
Listed on NZIoC (New Zealand Inventory of Chemicals)	
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>Triphenyl Phosphate (115-86-6)</b>	
Listed on the AICS (Australian Inventory of Chemical Substances)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory	
Listed on the Japanese ISHL (Industrial Safety and Health Law)	
Listed on the Korean ECL (Existing Chemicals List)	
Listed on NZIoC (New Zealand Inventory of Chemicals)	
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on the Canadian IDL (Ingredient Disclosure List)	
<b>Tert-butylphenyl Diphenyl Phosphate (56803-37-3)</b>	
Listed on the AICS (Australian Inventory of Chemical Substances)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)	
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)	
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory	
Listed on the Japanese ISHL (Industrial Safety and Health Law)	
Listed on the Korean ECL (Existing Chemicals List)	
Listed on NZIoC (New Zealand Inventory of Chemicals)	
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

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### SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 01/20/2016

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### GHS Full Text Phrases:

Acute Tox. 4 (Inhalation:vapor)	Acute toxicity (inhalation:vapor) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
H332	Harmful if inhaled
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H411	Toxic to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life

#### Party Responsible for the Preparation of This Document

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*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

North America GHS US 2012 & WHMIS 2