

# Roflex T70L

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 06/16/2023

Version: 1.0



### SECTION 1: Identification

#### 1.1. Identification

Product form : Substance  
Trade name : Roflex T70L  
CAS-No. : 68937-40-6  
Other means of identification : Phenol, isobutylenated, phosphate (3:1)  
Reaction mass of p-t-butylphenyldiphenyl phosphate and bis(p-t-butylphenyl) phenyl phosphate and triphenyl phosphate

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Functional Fluids

#### 1.3. Details of the supplier of the safety data sheet

PCC Chemax, Inc.  
30 Old Augusta Road  
Piedmont, SC 29673 - USA  
T 1-864-277-7000  
[cpatterson@pcc-chemax.com](mailto:cpatterson@pcc-chemax.com) - [www.pcc-chemax.com](http://www.pcc-chemax.com)

#### 1.4. Emergency telephone number

Emergency number : 1-800-424-9300 (CHEMTREC)  
+1-703-527-3887 Outside the United States

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Not classified

#### 2.2. Label elements

##### GHS US labeling

No labeling applicable

#### 2.3. Other hazards

Other hazards which do not result in classification : Not applicable.

#### 2.4. Unknown acute toxicity (GHS US)

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Name : Phenol, isobutylenated, phosphate (3:1)  
CAS-No. : 68937-40-6

Name	Product identifier	%	GHS US classification
Phenol, isobutylenated, phosphate (3:1)	(CAS-No.) 68937-40-6	≥ 97	Not classified
Phenol, 4-(1,1-dimethylethyl)-, phosphate (3:1)	(CAS-No.) 78-33-1	0.1 – 3	Not classified
Triphenyl phosphate	(CAS-No.) 115-86-6	< 2.5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of hazard classes and H-statements : see section 16

#### 3.2. Mixtures

Not applicable

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell.  
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

# Roflex T70L

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

First-aid measures after skin contact	: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Rinse mouth.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation	: None under normal use.
Symptoms/effects after skin contact	: None under normal use.
Symptoms/effects after eye contact	: None under normal use.
Symptoms/effects after ingestion	: None under normal use.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: If there is a fire close by, use suitable extinguishing agents. Carbon dioxide. Dry powder. Foam. Sand. Water spray.
Unsuitable extinguishing media	: Do not use a heavy water stream. Apply aqueous extinguishing media carefully to prevent frothing/steam explosion.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Reactivity	: Thermal decomposition may produce : Carbon oxides (CO, CO <sub>2</sub> ). Phosphorus oxides.

### 5.3. Advice for firefighters

Firefighting instructions	: Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective equipment may intervene. Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information	: In case of fire and/or explosion do not breathe fumes. Spill area may be slippery.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.
------------------	--

#### 6.1.1. For non-emergency personnel

Protective equipment	: Only qualified personnel equipped with suitable protective equipment may intervene.
Emergency procedures	: Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective equipment may intervene.

#### 6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area.

### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

For containment	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.
Methods for cleaning up	: Stop leak if safe to do so. Contain or absorb spilled liquid with non-combustible material. Prevent runoff from entering drains, sewers or waterways.
Other information	: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of contaminated materials refer to section 13: "Disposal considerations".

# Roflex T70L

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Additional hazards when processed : Avoid contact with skin, eyes and clothing.
- Precautions for safe handling : Ensure good ventilation of the work station. Use personal protective equipment as required. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
- Hygiene measures : Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in dry, cool, well-ventilated area. Store in original container.
- Incompatible materials : Strong oxidizers. Strong acids. Strong bases.
- Storage temperature : -20 – 40 °C
- Storage area : Store, if possible, in a cool, well ventilated place away from incompatible materials.
- Special rules on packaging : Handle unclean empty containers as full ones.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters and occupational exposure limits

Phenol, 4-(1,1-dimethylethyl)-, phosphate (3:1) (78-33-1)		
Not applicable		
Phenol, isobutyleneated, phosphate (3:1) (68937-40-6)		
Not applicable		
Triphenyl phosphate (115-86-6)		
ACGIH	ACGIH OEL TWA	3 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) [1]	3 mg/m <sup>3</sup>
IDLH	IDLH	1000 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA)	3 mg/m <sup>3</sup>

#### 8.2. Exposure controls

- Appropriate engineering controls : Provide local exhaust or general room ventilation. Avoid all unnecessary exposure.
- Hand protection : Wear suitable gloves resistant to chemical penetration.
- Eye protection : Chemical goggles or safety glasses.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear appropriate mask.
- Environmental exposure controls : Avoid release to the environment.
- Other information : Do not eat, drink or smoke when using this product.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Clear.
- Color : Colorless to light yellow
- Odor : Slight
- Odor threshold : No data available
- pH : No data available
- Melting point : No data available
- Freezing point : < -15 °C
- Boiling point : > 400 °C
- Flash point : > 230 °C Open cup
- Relative evaporation rate (butyl acetate=1) : No data available

# Roflex T70L

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Flammability	: Not applicable.
Vapor pressure	: 0.00000032 kPa
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.1 – 1.15 g/cm <sup>3</sup> [25°C]
Solubility	: Insoluble in water. Soluble in acetone. Soluble in ethanol. Soluble in methanol.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: > 500 °C
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 200 – 400 mPa·s [25°C]
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Thermal decomposition may produce : Carbon oxides (CO, CO<sub>2</sub>). Phosphorus oxides.

### 10.2. Chemical stability

Stable under normal conditions of use.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Stable under recommended handling and storage conditions (see section 7).

### 10.5. Incompatible materials

Strong oxidizers. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Likely routes of exposure	: Skin and eye contact
Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

#### Phenol, isobutylenated, phosphate (3:1) (68937-40-6)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 0.4 mg/l (Exposure time: 6 h)

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitization	: Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)

# Roflex T70L

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Phenol, isobutylenated, phosphate (3:1) (68937-40-6)	
NOAEL (dermal,rat/rabbit)	10 mg/kg body weight Sub-acute (Exposure time: 21 d)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Phenol, isobutylenated, phosphate (3:1) (68937-40-6)	
NOAEL (subchronic,oral,animal/male,90 days)	107.5 mg/kg body weight (Species: Rat)
NOAEL (subchronic,oral,animal/female,90 days)	124.8 mg/kg body weight (Species: Rat)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

Symptoms/effects after inhalation : None under normal use.

Symptoms/effects after skin contact : None under normal use.

Symptoms/effects after eye contact : None under normal use.

Symptoms/effects after ingestion : None under normal use.

## SECTION 12: Ecological information

### 12.1. Toxicity

Phenol, isobutylenated, phosphate (3:1) (68937-40-6)	
LC50 - Fish [1]	> 76 µg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 - Crustacea [1]	> 73 µg/l (Exposure time: 48 h - Species: Daphnia magna)
NOEC (acute)	0.22 mg/l (Exposure time: 96 h - Species: Pseudokirchnerella subcapitata)
NOEC chronic fish	0.1 mg/l (Exposure time: 33 d - Species: Pimephales promelas)
NOEC chronic crustacea	0.088 mg/l (Exposure time: 21 d - Species: Daphnia magna)

Triphenyl phosphate (115-86-6)	
LC50 - Fish [1]	0.32 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 - Crustacea [1]	0.18 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 - Fish [2]	0.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
NOEC chronic crustacea	0.254 mg/l (Exposure time: 21 d - Species: Daphnia magna)

### 12.2. Persistence and degradability

Roflex T70L	
Persistence and degradability	83 % biodegradation 28 days. Readily biodegradable. (OECD 301D method).

Phenol, isobutylenated, phosphate (3:1) (68937-40-6)	
Persistence and degradability	83 % biodegradation 28 days. Readily biodegradable. (OECD 301D method).

### 12.3. Bioaccumulative potential

Roflex T70L	
Bioaccumulative potential	Not established.

Phenol, isobutylenated, phosphate (3:1) (68937-40-6)	
Bioconcentration factor (BCF REACH)	1850

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Effect on global warming : Not determined

Other information : Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Clean up even minor leaks or spills if possible without unnecessary risk.

Ecology - waste materials : Avoid release to the environment.

# Roflex T70L

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 14: Transport information

#### Department of Transportation (DOT)

Not regulated for transport

#### Transport by sea

Not regulated

#### Air transport

Not regulated

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### Roflex T70L

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag

TP - TP - indicates a substance that is the subject of a proposed TSCA section 4 test rule.

SARA Section 311/312 Hazard Classes

Not classified as hazardous according to GHS

Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

Triphenyl phosphite

CAS-No. 115-86-6

< 2.5%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

#### 15.2. International regulations

##### National regulations

##### Roflex T70L

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

Listed on TECI (Thailand Existing Chemicals Inventory)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

Listed on the NCI (National Chemicals Inventory) of Vietnam

#### 15.3. US State regulations

##### Triphenyl phosphite (115-86-6)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

U.S. - Minnesota - Hazardous Substance List

U.S. - Massachusetts - Right To Know List

### SECTION 16: Other information

Full text of H-phrases:

H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS US (GHS HazCom 2012) - Custom 2020-01

*This information is based on our current knowledge and it is intended to describe the product for the purposes of health, safety, and environmental requirements only. No warranty, as to the accuracy, completeness, or adequacy of the information contained herein is either expressed or implied. Users must determine individually, by testing or otherwise, the suitability of this product for their purposes, including mixing with other products. The revision of the document supersedes all those previously issued for the product.*