

Roflex T-70

Safety Data Sheet

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

Issue date: 04/09/2021

Version: 1.0



SECTION 1: Identification

1.1. Identification

Product form : Substance
Trade name : Roflex T-70
CAS-No. : 68937-40-6
Other means of identification : Phenol, isobutyleneated, 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

No additional information available

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 - 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

Hazardous to the aquatic environment - Acute Hazard Category 1 H400

Hazardous to the aquatic environment - Chronic Hazard Category 1 H410

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



GHS09

Signal word (GHS US) :

Warning

Hazard statements (GHS US) :

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS US) :

P273 - Avoid release to the environment.
P391 - Collect spillage.
P501 - Dispose of contents/container to ensure all national/local regulations are observed.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name : Phenol, isobutyleneated, phosphate (3:1)

CAS-No. : 68937-40-6

Name	Product identifier	%	GHS US classification
Phenol, isobutyleneated, phosphate (3:1)	(CAS-No.) 68937-40-6	97 – 99	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Phenol, 4-(1,1-dimethylethyl)-, phosphate (3:1)	(CAS-No.) 78-33-1	1 – 3	Not classified

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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 | : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). |
| First-aid measures after inhalation | : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell. |
| First-aid measures after skin contact | : Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. |
| 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. Immediately call a poison center or doctor/physician. |
| 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

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|-------------------------------------|--|
| Symptoms/effects | : Not expected to present a significant hazard under anticipated conditions of normal use. |
| Symptoms/effects after inhalation | : May cause respiratory irritation. |
| Symptoms/effects after skin contact | : None under normal use. |
| Symptoms/effects after eye contact | : None under normal use. |
| Symptoms/effects after ingestion | : Ingestion may cause nausea, vomiting and diarrhea. |

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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| Suitable extinguishing media | : Carbon dioxide. Dry powder. Foam. Sand. Water spray. |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

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|------------------|---|
| Explosion 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 ₂). Phosphorus oxides. |

5.3. Advice for firefighters

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|--------------------------------|---|
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment. Exercise caution when fighting any chemical fire. |
| 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

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| General measures | : Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. |
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6.1.1. For non-emergency personnel

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| Emergency procedures | : Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective equipment may intervene. |
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6.1.2. For emergency responders

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| Protective equipment | : Equip cleanup crew with proper protection. |
| Emergency procedures | : Ventilate area. |

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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| For containment | : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. |
|-----------------|---|

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Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Store away from other materials.

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".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Avoid contact with skin, eyes and clothing. Do not breathe mist, spray, vapors.
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide adequate ventilation to minimize dust and/or vapor concentrations. Use personal protective equipment as required.
Hygiene measures : Wash hands, forearms and face thoroughly after handling. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.
Incompatible materials : Strong oxidizers. Strong bases. Strong acids.
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, isobutylated, phosphate (3:1) (68937-40-6)

Not applicable

Phenol, 4-(1,1-dimethylethyl)-, phosphate (3:1) (78-33-1)

Not applicable

8.2. Exposure controls

Appropriate engineering controls : Local exhaust and general ventilation must be adequate to meet exposure standards.
Hand protection : Wear suitable gloves resistant to chemical penetration.
Eye protection : 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.
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 : No data available
Odor : Slight characteristic
Odor threshold : No data available
pH : 3.86 @ 5% in 50/50 isopropanol/water
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : > 230 °C Open cup
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : Not applicable. Non flammable.
Vapor pressure : No data available

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Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 1.17 g/cm ³
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition may produce : Carbon oxides (CO, CO₂). Phosphorus oxides.

10.2. Chemical stability

No additional information available

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 bases. Strong acids.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure	: Inhalation; Skin and eye contact; Ingestion
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 (Lack of data)

Roflex T-70	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg

Phenol, isobutylenated, phosphate (3:1) (68937-40-6)	
LD50 oral rat	> 5 g/kg

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 3.86 @ 5% in 50/50 isopropanol/water
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met) pH: 3.86 @ 5% in 50/50 isopropanol/water
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 (Lack of data)

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STOT-repeated exposure	: Not classified (Lack of data)
Aspiration hazard	: Not classified (Lack of data)
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: None under normal use.
Symptoms/effects after eye contact	: None under normal use.
Symptoms/effects after ingestion	: Ingestion may cause nausea, vomiting and diarrhea.

SECTION 12: Ecological information

12.1. Toxicity

Roflex T-70	
Ecology - general	Very toxic to aquatic life with long lasting effects.
Roflex T-70	
LC50 fish 1	0.8 mg/l (Exposure time: 96 h - Species: Ictalurus punctatus)
EC50 other aquatic organisms 1	0.202 mg/l (Exposure time: 48 h - Species: Daphnia magna)
ErC50 (algae)	3 mg/l (EC50: Exposure time: 96 h - Species: Selenastrum capricornutum (Fresh water))
NOEC chronic fish	0.194 mg/l (Exposure time: 90 days - Species: Pimephales promales)
NOEC chronic crustacea	0.0399 mg/l (Exposure time: 21 days - Species: Daphnia)

12.2. Persistence and degradability

Roflex T-70	
Persistence and degradability	Readily biodegradable. May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

Roflex T-70	
Bioaccumulative potential	Not established.

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

Product/Packaging disposal recommendations	: Dispose of contents/container to ensure all national/local regulations are observed.
Additional information	: Wear personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Clean up even minor leaks or spills if possible without unnecessary risk.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

Transport document description	: UN3082 Environmentally hazardous substances, liquid, n.o.s. (Contains phenol, isobutylated, phosphate (3:1)), 9, III
Class (DOT)	: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
Packing group (DOT)	: III - Minor Danger
Hazard labels (DOT)	: 9 - Class 9 (Miscellaneous dangerous materials)



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Marine pollutant : Yes



Emergency Response Guide (ERG) Number : 171

Other information : In accordance with the U.S. Department of Transportation (DOT), not regulated for domestic transport in containers less than 119 gallons/450 L.

Transport by sea

UN-No. (IMDG) : 3082
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class (IMDG) : 9 - Miscellaneous dangerous substances and articles
Packing group (IMDG) : III - substances presenting low danger
Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains phenol, isobutyleneated, phosphate (3:1)), 9, III, MARINE POLLUTANT
EmS-No. (1) : F-A
EmS-No. (2) : S-F
Marine pollutant : Yes

Air transport

UN-No. (IATA) : 3082
Proper Shipping Name (IATA) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class (IATA) : 9 - Miscellaneous Dangerous Goods
Packing group (IATA) : III - Minor Danger
Transport document description (IATA) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Contains phenol, isobutyleneated, phosphate (3:1)), 9, III

SECTION 15: Regulatory information

15.1. US Federal regulations

Roflex T-70	
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	Immediate (acute) health hazard

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

Roflam B7
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECL/KECI (Korean Existing Chemicals Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

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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.