

SAFETY DATA SHEET

Regulation (EC) No 1907/2006 (REACH), Annex II
(COMMISSION REGULATION (EU) No 453/2010)

Version 1

Product Name Triaryl isopropylated phosphate

Issue Date 25-Mar-2015

Revision date 25-Mar-2015

SECTION 1: Identification of the substance /mixture and of the company/undertaking

1.1. Product identifier

Product Name	Triaryl isopropylated phosphate
CAS No	68937-41-7
REACH registration number	No information available

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

Recommended Use	It is recommended as a flame retardant for PVC, polyethylene, leatheroid, film, cable, electrical wire, flexible polyurethanes, cullulosic resins, and synthetic rubber.
Uses advised against	No information available

1.3. Details of the supplier of the safety data sheet

Supplier	Zhangjiagang Fortune Chemical Co., Ltd
Address	Rm309, Bldg #8, Oriental New Plaza, Zhangajiagang city, Jiangsu Province, China
Postal Code	215600
Phone	+86-512-58740306
FAX	+86-512-58960306
E-mail	sales@fortunechemtech.com

1.4. Emergency telephone number

+86-13815295628

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Reproductive Toxicity	Category 2 - (H361)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 2 - (H411)

Classification according to Directive 67/548/EEC or 1999/45/EC

Repr. cat. 3; R62
Xn;R48/20
N;R50/53

2.2. Label elements

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Symbols/Pictograms



Signal word

Warning

Hazard Statements

H361 - Suspected of damaging fertility or the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure

H400 - Very toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P281 - Use personal protective equipment as required

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P405 - Store locked up

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P314 - Get medical advice/attention if you feel unwell

P273 - Avoid release to the environment

P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other hazards

No information available

SECTION 3: Composition/information on ingredients

3.1. Mixture

Chemical Name	EC No	CAS No	Weight-%	Classification according to Directive 67/548/EEC or 1999/45/EC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Triaryl isopropylated phosphate	273-066-3	68937-41-7	64-74	Repr. Cat. 3; R62 Xn; R48/20 N; R51/53	STOT RE 2 (H373) Repr. 2 (H361) Aquatic Chronic 2 (H411)
Triphenyl phosphate	204-112-2	115-86-6	26-33	N;R50/53	Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)

SECTION 4: First aid measures

4.1. Description of first aid measures

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General advice

Do not breathe dust/fume/gas/mist/vapors/spray. Repeated contact may cause allergic reactions in very susceptible persons. Remove and isolate contaminated clothing and shoes. If symptoms persist, call a physician.

Inhalation

Move to fresh air in case of accidental inhalation of vapors or decomposition products. If symptoms persist, call a physician.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Never give anything by mouth to an unconscious person

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

May cause damage to organs through prolonged or repeated exposure

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors

5.3. Advice for firefighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

- Evacuate personnel to safe areas
- Ensure adequate ventilation, especially in confined areas
- Remove all sources of ignition
- Avoid contact with skin, eyes and inhalation of vapors
- Wear protective gloves/protective clothing and eye/face protection
- Use personal protection recommended in Section 8

6.2. Environmental precautions

- Local authorities should be advised if significant spillages cannot be contained
- Prevent entry into waterways, sewers, basements or confined areas

6.3. Methods and material for containment and cleaning up

- Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13)

6.4. Reference to other sections

- See Section 7 for more information
- See section 8 for more information
- See section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Handle in accordance with good industrial hygiene and safety practice
- Ensure adequate ventilation, especially in confined areas
- Avoid contact with skin, eyes or clothing
- Wash contaminated clothing before reuse
- Do not breathe dust/fume/gas/mist/vapors/spray
- Do not eat, drink or smoke when using this product
- Wash thoroughly after handling
- Use personal protective equipment as required

7.2. Conditions for safe storage, including any incompatibilities

- Keep containers tightly closed in a dry, cool and well-ventilated place
- Keep away from heat
- Keep locked up and out of reach of children
- Keep away from food, drink and animal feeding stuffs
- Store in accordance with local regulations

7.3. Specific end use(s)

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Apart from the uses mentioned in SECTION 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical Name	Australia	Austria	Belgium	Denmark	European Union
Triphenyl phosphate (CAS #: 115-86-6)	3 mg/m ³	STEL 6 mg/m ³ TWA: 3 mg/m ³	-	TWA: 3 mg/m ³	-

Chemical Name	Norway	United Kingdom	ACGIH TLV	OSHA PEL	NIOSH IDLH
Triphenyl phosphate (CAS #: 115-86-6)	-	-	TWA: 3 mg/m ³	-	-

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

8.2. Exposure controls

Engineering Controls

Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles)
Hand Protection	Wear protective gloves
Skin and body protection	Suitable protective clothing
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls

Do not allow into any sewer, on the ground or into any body of water

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Color	No information available
Odor	No information available
Odor Threshold	Not determined
pH	Not determined
Melting point/freezing point	Not determined

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Boiling point / boiling range	225°C
Flash point	250°C
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Flammability Limit in Air	Not determined
Vapor Pressure	Not determined
Vapor density	Not determined
Density	1.183 g/cm ³
Relative density	Not determined
Specific gravity	Not determined
Water solubility	Not determined
Partition coefficient (LogPow)	Not determined
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic viscosity	Not determined
Explosive properties	Not an explosive
Oxidizing properties	Not determined

9.2. Other information

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

Heat, flames and sparks

10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

No information available

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No information available.

Skin corrosion/irritation

Non-irritating to the skin.

Serious eye damage/eye irritation

No eye irritation.

Sensitization

No sensitization responses were observed.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Reproductive toxicity

Suspected of damaging fertility or the unborn child

STOT - single exposure

No information available.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure

Aspiration hazard

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Chemical Name	Algae/aquatic plants EC50	Fish LC50	Crustacea EC50
Triphenyl phosphate (CAS #: 115-86-6)	0.6 - 4: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	-	-

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12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Chemical Name	Bioconcentration factor (BCF)
Triphenyl phosphate (CAS #: 115-86-6)	193

12.4. Mobility in soil

No information available

12.5. Results of PBT and vPvB assessment

PBT/vPvB assessment information is not available as chemical safety assessment not conducted.

12.6. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Disposal should be in accordance with applicable regional, national and local laws and regulations

Contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and regulations

SECTION 14: Transport information

14.1 UN Number 3082

14.2 Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3 Hazard Class 9

14.4 Packing Group III

14.5 Environmental hazards Marine pollutant

14.6 Special precautions No information available

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14.7 Transport in bulk according to Annex II of
MARPOL 73/78 and the IBC Code Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Take note of Directive 94/33/EC on the protection of young people at work

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

International Inventories

Component	TSCA	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS	
Triaryl isopropylated phosphate 68937-41-7 (62-68)		X	X	X	-	X	X	X	X
Triphenyl phosphate 115-86-6 (32-38)		X	X	X	X	X	X	X	X

"-" Not Listed

"X" Listed

15.2. Chemical safety assessment

No information available

SECTION 16: Other information

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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Revision Note Not applicable

Key or legend to abbreviations and acronyms used in the safety data sheet

TWA - TWA (time-weighted average)

STEL - STEL (Short Term Exposure Limit)

Ceiling - Maximum limit value

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

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ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Full text of H-Statements referred to under section 3

H400 - Very toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects.

H373 - May cause damage to organs through prolonged or repeated exposure if inhaled

H361 - Suspected of damaging fertility or the unborn child

Full text of R-phrases referred to under sections 2 and 3

R62 - Possible risk of impaired fertility

R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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