

MATERIAL SAFETY DATA SHEET

SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Name: Tris(2-chloroisopropyl) Phosphate, Tris(1-chloro-2-propyl) phosphate; Fyrol PCF, Tris(chloropropyl) Phosphate, TCPP, Tris (beta-chloroisopropyl) Phosphate: Amgard TMPP; AP 33 ; Noinen R 921 Pelron 9338 ; TMCPP

CAS No.: 13674-84-5

Manufacturer: Xuancheng City Trooyawn Refined Chemical Industry Co.,Ltd

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SECTION II - COMPOSITION/INFORMATION

Components	EINECS/ELINCS	CAS Number	Concentration(weight)
Tris(2-chloroisopropyl) phosphate	237-158-7	13674-84-5	99.5%

SECTION III - HAZARDS IDENTIFICATION

Not classified as hazardous according to the EEC Dangerous Substance Directive and Dangerous Preparation Directive.

SECTION IV - FIRST AID MEASURES

General advice: Move victim from the contaminated workplace to ventilated place. Call the hospital for medical assistance and provide emergency treatment.

If inhaled: Remove victim to fresh air. If case of irritation of respiratory system or mucous membranes, in case of indisposition or prolonged exposure, seek medical attention.

On skin contact: Wash with plenty of soap and water. Do not use organic solvent.

On contact with eyes: Immediately flush eyes with water for at least 15 minutes. In case of eye irritation, seek medical attention.

Ingestion: Immediately induce vomiting. Never give fluids or induce vomiting, if the victim is unconscious or having convulsions. Get immediately medical attention.

Note to physician: None.

SECTION V - FIRE FIGHTING MEASURES

Suitable extinguishing media: Water fog, Foam, Dry chemical powder.,

Unsuitable extinguishing media for safety reasons: High-pressure water jet.

The following can be given off in a fire: The CO, CO₂, NO_x can be given off.

Special protective equipment: Good fire fighting practice dictates the use of self-contained breathing apparatus and turnout gear.

Further information: Adequate ventilation and clean up must be maintained to minimize dust accumulation .May form explosive dust-air mixture.

SECTION VI - ACCIDENTAL RELEASE MEASURES

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Accidental Release Measures: Contain spill.

Wearing appropriate personal protective equipment, collect spill with the aid of an inert absorbent and place in suitable labeled containers for disposal.

Personal Precautions: See Section VIII.

Environmental Precautions: Avoid releasing to the environment.

Additional Information: No information available

SECTION VII - HANDLING AND STORAGE

Handling The usual precautions for handling chemicals should be observed.

Fire and explosion prevention Does not present a serious fire hazard.

Storage requirements Keep container tightly closed in a cool place. Keep container in a well-ventilated place.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls The usual precautionary measures for handling chemicals should be observed.

Exposure limits No exposure limits have been established for this material.

Personal protection

Respiratory Wear appropriate respiration when ventilation is inadequate.

Hand Wear suitable gloves (rubber).

Eye Chemical resistant goggles must be worn.

Skin and body Long sleeve shirts and trousers without cuffs.

SECTION IX - PHYSICAL & CHEMICAL PROPERTIES

Appearance liquid

Color clear, colorless

Odor sweet (slightly)

Boiling point/range not determined

Melting point/range not determined

Flash point 218 °C (Cleveland, open cup)

Flammability not determined

Auto-ignition temperature not determined

Explosive properties not determined

Explosion limits not determined

Oxidizing properties not determined

Vapour pressure 100 Pa (20 °C)

Density approx. 1290 kg/m³ (25 °C)

Bulk density not applicable

Solubility in water < 10 g/l (25 °C).

Hydrolyses slowly under weak alkaline or acidic conditions

Solubility in other solvents not determined

pH value acid number: approx. 0.05 mg KOH/g (ASTM-D -974)

Partition coefficient n-octanol/water not determined

Relative vapour density (air=1) not determined

Viscosity 71 mPa.s (25 °C)

SECTION X - STABILITY AND REACTIVITY

Stability The product is stable (below 150 °C).

Hydrolyses slowly under weak alkaline or acidic conditions.

Conditions to avoid Generation of heat.

Materials to avoid acids, alkalis.

Hazardous decomposition products above 150 °C: hydrochloric acid (HCl), chlorinated hydrocarbons.

Other information No typical hazardous reactions known.

SECTION XI - TOXICOLOGICAL INFORMATION

Name Tris(2-chloroisopropyl) phosphate

Acute toxicity

Oral LD50 rat: 2800-4200 mg/kg

Dermal LD50 rabbit: > 5000 mg/kg

Inhalation LC50 rat (4 hours): > 4.6 mg/l

Irritation

Skin rabbit (24 hours) : Mildly irritating

Eye rabbit: Non-irritating

SECTION XII - ECOLOGICAL INFORMATION

Name Tris(2-chloroisopropyl) phosphate

Ecotoxicity

algae 96 h-EC50: 47 mg/l

Fate

Degradation Biotic Not readily biodegradable

Other information Daphnia magna reproduction test (Chronic exposure 21 days), No Observed Effect

Concentration (NOEC) =32 mg/l

SECTION XIII - DISPOSAL CONSIDERATIONS

Product Please refer to your specific industry in the European Waste Catalogue.

Contaminated packaging According to local regulations.

SECTION XIV - TRANSPORT INFORMATION

Land transport (ADR/ RID)

ADR class not restricted **ADR/RID item no.** not relevant / not relevant

RID class not restricted **ADR/RID packing group**

Hazard Identification No. not relevant **Substance Identification No.** not relevant

TREM-Card not relevant **UN number** none

Proper Shipping Name not relevant

Sea transport (IMDG-code/ IMO)

IMO/IMDG code not restricted **Class** not restricted

Packing group not relevant **UN number** none

EMS not relevant **MFAG** not relevant

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Marine pollutant no

Proper Shipping Name not relevant

Air transport (ICAO-TI/ IATA-DGR)

ICAO-TI/IATA-DGR UN number none

Class not restricted **Packing group** not relevant

Proper Shipping Name not relevant

SECTION XV - REGULATORY INFORMATION

Chemical description Tris(2-chloroisopropyl) phosphate

Symbol(s) none

R(isk) phrase(s) none

S(afety) phrase(s) none

SECTION XVI - OTHER INFORMATION

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations.

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any guarantee with regard to the product's properties.

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