

# **SAFETY DATA SHEET**

Revision Date 19-Jan-2018 Revision Number 3

1. Identification

Product Name Phosphonitrilic chloride trimer

Cat No.: AC174280000; AC174280050; AC174280250; AC174280500;

AC174281000

**CAS-No** 940-71-6

**Synonyms** 1,3,5-Triaza-2,4,6-triphosphorin-2,2,4,4,6,6-hexachloride; Hexachlorocyclotriphosphazene;

Hexachlorotriphosphazene

Recommended Use Laboratory chemicals.

Uses advised against Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company

Fisher Scientific Acros Organics
One Reagent Lane One Reagent Lane
Fair Lawn, NJ 07410 Fair Lawn, NJ 07410

Tel: (201) 796-7100

**Emergency Telephone Number** 

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99 **CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

# 2. Hazard(s) identification

## Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/irritation Category 1 B
Serious Eye Damage/Eye Irritation Category 1

Label Elements

# Signal Word

Danger

#### **Hazard Statements**

Causes severe skin burns and eye damage



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#### **Precautionary Statements**

#### Prevention

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

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

#### Response

Immediately call a POISON CENTER or doctor/physician

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

#### **Eves**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing **Ingestion** 

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

#### Storage

Store locked up

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)

Reacts violently with water

# 3. Composition/Information on Ingredients

Component	CAS-No	Weight %			
1,3,5,2,4,6-Triazatriphosphorine,	940-71-6	>95			
2,2,4,4,6,6-hexachloro-2,2,4,4,6,6-hexahydro-					

## 4. First-aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Immediate medical attention is required. Keep eye wide open while rinsing.

**Skin Contact**Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Call a physician immediately.

**Inhalation**Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give

artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

proper respiratory medical device.

**Ingestion** Do not induce vomiting. Never give anything by mouth to an unconscious person. Drink

plenty of water. Immediate medical attention is required.

Most important symptoms and

effects

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should

be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue

and danger of perforation

Notes to Physician Treat symptomatically

## 5. Fire-fighting measures

Suitable Extinguishing Media CO 2, dry chemical, dry sand, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

Not applicable

**Autoignition Temperature** 

**Explosion Limits** 

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

## **Specific Hazards Arising from the Chemical**

Reacts violently with water.

#### **Hazardous Combustion Products**

Hydrogen chloride gas Nitrogen oxides (NOx) Phosphorus trihydride (phosphine) Thermal decomposition can lead to release of irritating gases and vapors

## **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health Sammability Instability Physical hazards 0 W

### Accidental release measures

Personal Precautions Evacuate personnel to safe areas. Use personal protective equipment. Avoid contact with

skin, eyes and clothing.

Environmental Precautions Do not allow material to contaminate ground water system. Should not be released into the

environment. See Section 12 for additional ecological information.

Methods for Containment and Clean Do not expose spill to water.

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	7. Handling and storage
Handling	Do not allow contact with water. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood.
Storage	Keep away from water. Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area.

## 8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure

limitsestablished by the region specific regulatory bodies.

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

Personal Protective Equipment

**Eye/face Protection** Tightly fitting safety goggles. Face-shield.

**Skin and body protection** Long sleeved clothing.

Respiratory Protection Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline

respirator in the positive pressure mode with emergency escape provisions.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and chemical properties

Physical State Powder Solid

**Appearance** White

Odor No information available
Odor Threshold No information available
pH No information available

Melting Point/Range 111 - 115 °C / 231.8 - 239 °F

Boiling Point/RangeNo information availableFlash PointNo information available

Evaporation Rate Not applicable

Flammability (solid,gas) No information available

Flammability or explosive limits

UpperNo data availableLowerNo data availableVapor PressureNo information availableVapor DensityNot applicable

Specific Gravity 1.980

**Solubility**Partition coefficient; n-octanol/water
No information available
No data available

Autoignition TemperatureNot applicableDecomposition TemperatureNo information available

Viscosity Not applicable

Molecular Formula CI6 N3 P3
Molecular Weight 347.65

# 10. Stability and reactivity

Reactive Hazard Yes

**Stability** Moisture sensitive.

**Conditions to Avoid** Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents, Alcohols, Amines, Bases

Hazardous Decomposition Products Hydrogen chloride gas, Nitrogen oxides (NOx), Phosphorus trihydride (phosphine), Thermal

decomposition can lead to release of irritating gases and vapors

**Hazardous Polymerization** No information available.

**Hazardous Reactions** Reacts violently with water.

# 11. Toxicological information

**Acute Toxicity** 

**Product Information**No acute toxicity information is available for this product

Component Information

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

**Sensitization** No information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
1,3,5,2,4,6-Triazatriph	940-71-6	Not listed				
osphorine,						
2,2,4,4,6,6-hexachloro						
-2,2,4,4,6,6-hexahydro						
- 1						

**Mutagenic Effects** No information available

No information available. **Reproductive Effects** 

No information available. **Developmental Effects** 

**Teratogenicity** No information available.

STOT - single exposure None known None known STOT - repeated exposure

No information available Aspiration hazard

delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

# 12. Ecological information

**Ecotoxicity** 

Do not empty into drains. Reacts with water so no ecotoxicity data for the substance is available.

Persistence and Degradability Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

Is not likely mobile in the environment. **Mobility** 

# 13. Disposal considerations

Chemical waste generators must determine whether a discarded chemical is classified as a **Waste Disposal Methods** 

> hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

DOT

**UN-No** UN3096

Proper technical name 1,3,5,2,4,6-Triazatriphosphorine, 2,2,4,4,6,6-hexachloro-2,2,4,4,6,6-hexahydro-

**Hazard Class Subsidiary Hazard Class** 4.3 **Packing Group** 

**TDG** 

**UN-No** UN3096 **Hazard Class Subsidiary Hazard Class** 4.3 **Packing Group** 

**IATA** 

UN3260

**Proper Shipping Name** Corrosive solid, acidic, inorganic, n.o.s

**Hazard Class** 

#### Phosphonitrilic chloride trimer

Packing Group

IMDG/IMO

UN-No UN3260

Proper Shipping Name Corrosive solid, acidic, inorganic, n.o.s

Hazard Class 8
Packing Group ||

# 15. Regulatory information

#### International Inventories

Component	TSCA	DSL	NDSL	<b>EINECS</b>	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
1,3,5,2,4,6-Triazatriphosphori	Х	-	Х	213-376-8	-		-	Х	-	Х	Х
ne,											
2,2,4,4,6,6-hexachloro-2,2,4,											
4,6,6-hexahydro-											

#### Legend:

X - Listed

- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

## U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

**OSHA** Occupational Safety and Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Not applicable

Regulations

## **U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

# **U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

## Other International Regulations

Mexico - Grade No information available

16. Other information

Prepared By Regulatory Affairs

Thermo Fisher Scientific

Email: EMSDS.RA@thermofisher.com

**Revision Date** 19-Jan-2018 **Print Date** 19-Jan-2018

**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS).

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and 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

End of SDS