

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Identification of the product

Product Description	Triisotridecyl Phosphite
Pure Substance/preparation	Substance
CAS-No	77745-66-5
EC number	278-758-9
Reach Registration number	A registration number is not available for this substance as the substance or its uses may be exempted or annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommended use	Laboratory chemical, Industrial chemical
Uses advised against	No additional information available

1.3 Details of the Supplier of the Safety Data Sheet

Supplier Address

UPL Limited
Uniphos House, Madhu Park,
Khar (W), Mumbai, India
Tel: +91-(022)- 2646-8000

E-mail address info.in@uniphos.com

1.4 Emergency Telephone Number

Emergency telephone number +91-(0260) 240017/18/19

2. Hazard Identification

2.1 Classification of the substance or Mixture

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

Skin Sensitization	Category 1 - (H317)
STOT - Single Exposure	Category 1 - (H335)

2.2 Label elements



Signal Word - Danger

Hazard Statement

H317 - May cause skin sensitization

H335 - May cause respiratory tract irritation

Precautionary Statement

Prevention

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the work place.

P280 Wear protective gloves/protective clothing/eye protection/face protection

Response

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see ... on this label)

P362+P364 Take off contaminated clothing and wash it before reuse.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTRE/doctor or physician if you feel unwell.

Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal

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

2.3 Other Hazards

No information available

3. Composition/information on Ingredients

3.1 Substance

Chemical name	CAS-No	EC No	W/W %	EU - GHS Substance Classification (REGULATION (EC) No 1272/2008)	REACH No.
Triisotridecyl Phosphite	77745-66-5	278-758-9	<=100	Skin Sens. (H317) STOT Single Exposure (H335)	no data available

For the full text of the H-Statements mentioned in this Section, see Section 16

4. First aid measures

4.1 Description of first-aid measures

General advice	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
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 attention.
Skin contact	Wash off with soap and plenty of water for at least 15 minutes. Clean contaminated clothing and shoes before reuse or discard if they cannot be thoroughly cleaned. If skin irritation or rash occurs, get medical attention.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth. Do not induce vomiting unless told by physician. If vomiting occurs ensure patient can breathe. Seek medical attention, if you feel unwell.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Give artificial respiration if victim is not breathing. Get medical attention, if you feel unwell.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

The most important known symptoms and effects are described in the labelling (See section 2) and/or in section 11.

Indication of immediate medical attention and special treatment needed

Treat symptomatically and supportively.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Use suitable extinguishing media appropriate local surroundings
Unsuitable extinguishing media	High pressure water jets may scatter and spread the fire

5.2 Special hazards arising from the substance or mixture

Special Hazard	Thermal decomposition can lead to release of irritating or toxic fumes (or gases) in fire. Hazardous decomposition products: Carbon oxides, Oxides of phosphorus
-----------------------	--

5.3 Advice for Firefighters

Wear self-contained breathing apparatus and protective suit. In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of involved material.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapour/spray. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. Avoid contact with skin and eye.

6.2 Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Pick and arrange disposal without creating dust. Sweep up and shovel into suitable container for disposal. Follow all label instructions regarding spill clean-up and residual disposal methods.

6.4 Reference to other sections

Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

7. Handling and Storage

7.1 Precautions for Safe Handling

Handling

Avoid contact with skin and eyes. Do not eat, drink or smoke while using the product. Wash hands thoroughly after handling. Wear appropriate protective equipment. Ensure adequate ventilation.

Hygiene measures

Keep away from food, drink and animal feedingstuffs. Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Store in a cool, dry place in tightly closed container.

7.3 Specific end uses

Laboratory chemical, Industrial chemical

8. Exposure Controls/ Personal Protection

8.1 Control Parameters

Exposure Limits Apply technical measures to comply with the occupational exposure limits

Derived No Effect level (DNEL) No information available

Predicted No Effect Concentration No information available

8.2 Exposure Controls

Ensure adequate ventilation, especially in confined areas. If applicable, use process enclosure, local exhaust ventilation, or other engineering controls to maintain airborne level below recommended exposure limits. If exposure limits have not been established maintain airborne levels to acceptable level.

Personal protective equipment

Eye protection Use safety google with side protection.

Skin protection Long-sleeved clothing. Preventative skin protection is recommended.

Hand protection Wear suitable protective glove/clothing. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of

contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Clear faint liquid	
Physical state	Solid	
Odor	Faint	
Odor threshold	No information available	
<u>Property</u>	<u>VALUES</u>	<u>Remarks/ Method</u>
pH	6-8	
Melting point/freezing point	-20°C	
Boiling Point/Range	No information available	
Flash Point	>80°C	Open cup method
Evaporation rate	<80°C	Close cup method
	No information available	
Flammability (solid, gas)	No information available	
Density	0.8863 g/cm ³	
Vapor Density	No information available	
Vapor pressure (air = 1)	1.14E-0.06 Pa at 25°C	
Water solubility	Insoluble	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity	20cP at 20°C	
Oxidizing properties	No information available	
Molecular formula	C39H81O3P	
Molecular weight	629.03	

10. Stability and Reactivity

10.1 Reactivity

None Known

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reaction

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Exposure to elevated temperature can cause product to decompose. Exposure to moisture.

10.5 Incompatible Materials

Oxidizing agents

Hazardous Decomposition Products

Non-combustible, substance itself may not burn but may decompose upon heating to produce irritant and/or toxic fumes. Keep product and empty container away from heat and sources of ignition.

Hazardous decomposition products formed under fire conditions: Carbon Oxides, Oxides of phosphorus, Phosphine

11. Toxicological Information

11. 1 Information on Toxicological Effects

Local effect

Inhalation	No information available
Eye contact	May cause eye irritation
Skin contact	May cause an allergic skin reaction
Ingestion	No information available

Chronic toxicity

Skin Corrosion/Irritation	May cause skin irritation
Eye damage/irritation	May cause eye irritation
Sensitization	May cause an allergic skin reaction
Mutagenic effects	No information available
Carcinogenic effects	No information available
Reproductive effects	No information available
STOT - Single Exposure	May cause respiratory irritation
STOT - repeated exposure	No information available
Aspiration hazard	No information available

12. Ecological Information

12.1 Ecotoxicity

No information available

12.2 Persistence and Degradability

No information available

12.3 Bioaccumulative Potential

No information available

12.4 Mobility in Soil

No information available

12.5 Results of PBT and vPvB Assessment



Preparation Date 28-Aug-2017

Revision date 28-Aug-2017

Revision Number: 01

No information available.
Log Kow = 16.73

12.6 Other Adverse Effects

No information available.

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

Do not reuse empty containers. Dispose of this container to hazardous or special waste collection point.

14. Transport Information

ADR/RID

Not Regulated

IMDG/IMO

Not Regulated

IATA/ICAO

Not Regulated

15. Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

International Inventories

USINV	-
TSCA	-
EINECS/ELINCS	Complies
DSL/NDSL	-
PICCS	Complies
ENCS	Complies
China	Complies
AICS	Complies
KECL	Complies

Legend

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out.



Preparation Date 28-Aug-2017

Revision date 28-Aug-2017

Revision Number: 01

16. Other Information

Full text of H-Statements referred to under sections 2 and 3

H317 May cause an allergic skin reaction

H335 May cause respiratory irritation

Preparation Date	28-Aug-2017
Revision date	28-Aug-2017
Revision note	01

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

Disclaimer

United Phosphorus, Limited. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with other materials or in any process. Further, since the conditions and methods of use are beyond the control of United Phosphorus, Limited. and United Phosphorus Limited. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

End of Safety Data Sheet