



Safety Data Sheet
According to Regulation (EU) No. 1907/2006, Annex II,
Amended by REGULATION (EU) No 453/2010,
According to Regulation (EU) No. 1272/2008

TCPP

Printing date: 08/10/2014

Version 1.1

Revision date: 08/10/2014

1 Identification of the substance and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name: TCPP
Additional identification: Tris(1-chloro-2-propyl)phosphate
Identification of the product: CAS# 13674-84-5; EC# 237-158-7
Index Number: Not available
REACH registration No.: Not available

1.2 Relevant identified uses of the substance and uses advised against:

1.2.1 Identified uses:

TCPP use is as a flame retardant in rigid and flexible polyurethane foam.

1.2.2 Uses advised against:

Not available.

1.3 Details of the supplier of the safety data sheet:

Supplier: Everchem Specialty Chemicals
Address: 1400 N. Providence Rd., Media, PA 19063

Telephone: 484-234-5030
Fax: 484-234-5037

1.4 Emergency telephone Number: Chemtrec 800-424-9300

Available outside office hours? _____ YES X NO

2 Hazards Identification

2.1 Classification of the substance

2.1.1 Classification:

The substance is classified as following according to 67/548/EEC and REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard statement
Skin Irrit. 2	H302

For full text of H- phrases: see section 2.2.

67/548/EEC	
Hazards characteristics	R-Phrases
Xn	R22

For full text of R- phrases: see section 16.

2.1.2 The most important adverse effects

2.1.2.1 The most important adverse physicochemical effects:

Not applicable.

2.1.2.2 The most important adverse human health effects:

Safety Data Sheet
According to Regulation (EU) No. 1907/2006, Annex II,
Amended by REGULATION (EU) No 453/2010,
According to Regulation (EU) No. 1272/2008

TCPP

Printing date: 08/10/2014

Version 1.1

Revision date: 08/10/2014

Harmful if swallowed.

2.1.2.3 The most important adverse environmental effects:

Not applicable.

2.2 label elements

Hazard Pictograms:



Signal Word(S):

Warning

Hazard Statement:

H302: Harmful if swallowed.

Precautionary Statement:

P264Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P501: Dispose of contents/container in accordance with local/state/international regulations.

2.3 Other hazards

Not available

3 Composition/information on ingredients

Substance/Mixture: Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
Tris(1-chloro-2-propyl)phosphate	N/A	13674-84-5	237-158-7	≥99.9%

4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

4.1.2 In case of skin contact:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. If irritation persists, seek medical attention.

4.1.3 In case of eyes contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

4.1.4 In case of ingestion:

Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed

If skin irritation or rash occurs, get medical advice/attention.

Safety Data Sheet
According to Regulation (EU) No. 1907/2006, Annex II,
Amended by REGULATION (EU) No 453/2010,
According to Regulation (EU) No. 1272/2008

TCPP

Printing date: 08/10/2014

Version 1.1

Revision date: 08/10/2014

5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Water spray, dry chemical, alcohol foam, or carbon dioxide.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

Emits dense, black smoke when burned. Carbon dioxide and carbon monoxide, phosphorus oxides, and phosphoric acid.

5.3 Advice for fire-fighters:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel:

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.

6.1.2 For emergency responders:

Wear an appropriate NIOSH/MSHA approved respirator if mist, vapor or dust is generated.

6.2 Environmental Precautions:

Provide ventilation. Do not let this chemical enter the environment.

6.3 Methods for Containment and Cleaning up:

If you spill this chemical, FIRST REMOVE ALL SOURCES OF IGNITION. Then, use absorbent paper to pick up all liquid spill material. Your contaminated clothing and absorbent paper should be sealed in a vapor-tight plastic bag for eventual disposal. Solvent wash all contaminated surfaces with ethanol followed by washing with a soap and water solution. Do not reenter the contaminated area until the Safety Officer (or other responsible person) has verified that the area has been properly cleaned.

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

6.5 Additional information:

Use proper personal protective equipment as indicated in Section 8.

7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

Remove contaminated clothing and wash before reuse. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material.

7.1.2 Advice on general occupational hygiene:

Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities:

Safety Data Sheet
According to Regulation (EU) No. 1907/2006, Annex II,
Amended by REGULATION (EU) No 453/2010,
According to Regulation (EU) No. 1272/2008

TCPP

Printing date: 08/10/2014

Version 1.1

Revision date: 08/10/2014

Containers have to be labelled clearly and permanently. Store in the original container as much as possible. Keep container tightly closed. Store in a cool place. Keep container in a well-ventilated place.

7.3 Specific end use(s):

Not applicable.

8 Exposure control/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: Not listed

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DMEL and PNEC-Values: Not available.

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

8.2.2 Individual protection measures, such as personal protective equipment:

Eye/face protection Use chemical safety goggles and/or full face shield to prevent eye exposure

Hand protection Wear appropriate gloves to prevent skin exposure.

Body protection Wear suitable protective clothing (Lab coat) to prevent skin exposure.

Respiratory protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Thermal hazards Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls:

Avoid discharge into the environment.

According to local regulations, Federal and official regulations.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Clear or light yellow
Odour:	Not available
Odour threshold:	Not available
pH:	Not available
Melting point/range (°C):	< -30°C
Boiling point/range (°C) :	Not available
Flash point (°C) :	≥240°C
Evaporation rate:	No information found
Flammability (solid, gas);	Not flammable
Ignition temperature (°C) :	Not determined
Upper/lower flammability/explosive limits:	Not available
Vapour pressure (20°C) :	Not available
Vapour density:	Not available
Relative Density (25°C):	1.27-1.31 g/cm ³
Bulk density (kg/m ³) :	Not determined
Water solubility (g/l) at 20°C :	Insoluble
n-Octanol/Water (log Po/w) :	3.33
Auto-ignition temperature:	Not available
Decomposition temperature:	244°C

Safety Data Sheet
According to Regulation (EU) No. 1907/2006, Annex II,
Amended by REGULATION (EU) No 453/2010,
According to Regulation (EU) No. 1272/2008

TCPP

Printing date: 08/10/2014

Version 1.1

Revision date: 08/10/2014

Viscosity, dynamic (mPa s) :	Not determined
Explosive properties:	Not determined
Oxidising properties:	Not applicable

9.2. Other information:

Fat solubility(solvent– oil to be specified) etc:	Not available
Surface tension:	Not available
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available

10 Stability and reactivity

10.1 Reactivity:

The substance is stable under normal storage and handling conditions.

10.2 Chemical stability:

Stable under ordinary conditions of use and storage.

10.3 Possibility of hazardous reactions:

No dangerous reactions known.

10.4 Conditions to avoid:

Keep away from heat, sparks, or open flame.

10.5 Incompatible materials:

Strong oxidizing agents, strong acids.

10.6 Hazardous decomposition products:

Carbon Dioxide and Carbon Monoxide.

11 Toxicological information

11.1 Toxicokinetics, metabolism and distribution

Non-human toxicological data: Not available

Method: Not available

Dosis: Not available

Routes of administration: Not available

Results: Not available

Absorption: Not available

Distribution: Not available

Metabolism: Not available

Excretion: Not available

11.2 Information on toxicological effects

Acute toxicity:

LD50(Oral, Rat):	200-2000 mg/kg
LD50(Dermal, Rabbit):	926-1710 mg/kg

Safety Data Sheet
According to Regulation (EU) No. 1907/2006, Annex II,
Amended by REGULATION (EU) No 453/2010,
According to Regulation (EU) No. 1272/2008

TCPP

Printing date: 08/10/2014

Version 1.1

Revision date: 08/10/2014

LC50(Oral, Rat):	>4.6mg/L
Skin corrosion/Irritation:	Not classified
Serious eye damage/irritation:	Not classified
Respiratory or skin sensitization:	Not classified
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
reproductive toxicity:	Not classified
STOT- single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified

12 Ecological information

Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
LC50	N/A	96h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	96h	Algae	OECD 201	N/A	N/A

Persistence and degradability:

No data available.

Bioaccumulative potential:

No data available.

Mobility in soil:

No data available.

Results of PBT&vPvB assessment:

Not applicable.

Other adverse effects:

Do not empty into drains. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13 Disposal considerations

13.1 Waste treatment methods

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options.

13.2 Product / Packaging disposal:

State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused

14 Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number:	Not regulated	Not regulated	Not regulated
UN Proper shipping name:	Not regulated	Not regulated	Not regulated
Transport hazard Class:	Not regulated	Not regulated	Not regulated
Packaging group:	Not regulated	Not regulated	Not regulated
Environmental hazards:	Not regulated	Not regulated	Not regulated

Safety Data Sheet
According to Regulation (EU) No. 1907/2006, Annex II,
Amended by REGULATION (EU) No 453/2010,
According to Regulation (EU) No. 1272/2008

TCPP

Printing date: 08/10/2014

Version 1.1

Revision date: 08/10/2014

Special precautions for user:	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated	Not regulated	Not regulated

15 Regulation information

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

Relevant information regarding authorization: Not applicable.
Relevant information regarding restriction: Not applicable.
Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.
Other National regulations: Not applicable
Chemical Safety Assessment has been carried out? YES NO

16 Other information

16.1 Indication of changes Version 1.1 Amended by EU No 453/2010

16.2 Relevant R- phrases (number and full text):

R22 Harmful if swallowed.

16.3 Training instructions:

Not applicable.

16.4 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.5 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.