

Revised edition no: 0
Date: 25 / 11 / 2015
Supersedes: 0 / 0 / 0

2,2,2-Trichloroethyl chloroformate

6357P

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

1.1 Product identifiers

Product name : 2,2,2-Trichloroethyl chloroformate

Product Number : 6357P CAS-No. : 17341-93-4 Molecular formula : C3H2Cl4O2

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

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.

107 Wode House Road, Jehangir Villa, Colaba

400005 Mumbai INDIA

Contact: +91 22 6663 6663 / Fax +91 22 6663 6699 / info@lobachemie.com Safety Officer: +91 98213 31336 / +91 98214 86040 / safety@lobachemie.com

1.4 Emergency telephone number

+ 91 22 6663 6663 (9:00am - 6:00 pm) [Office hours]

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity, Inhalation (Category 3), H331 Skin corrosion (Category 1B), H314

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

Classification according to EU Directives 67/548/EEC or 1999/45/EC

T Toxic R23, R34

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labeling according Regulation (EC) No 1272/2008 [CLP]



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Supersedes: 0 / 0 / 0

6357P

2,2,2-Trichloroethyl chloroformate

Hazard pictograms:





Signal word : Danger

Hazard statement(s)

H314 : Causes severe skin burns and eye damage.

H331 : Toxic if inhaled.

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

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

protection.

P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 : Immediately call a POISON CENTER or doctor/ physician.

Supplemental Hazard : None

Statements **R-phrase(s)**

R23 : Toxic by inhalation. R34 : Causes burns.

S-phrase(s)

S26 : In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.
S45 : In case of accident or if you feel unwell, seek medical advice

immediately (show the label where possible).

2.3 Other hazards

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances / Preparation: SubstanceSubstance NameContentCAS No.EC No.

2,2,2-Trichloroethyl 100% 17341-93-4 241-363-7

chloroformate

4. FIRST AID MEASURES



Revised edition no: 0

Date: 25 / 11 / 2015

Supersedes: 0 / 0 / 0

2,2,2-Trichloroethyl chloroformate

6357P

4.1. Description of first aid measures

Inhalation: Assure fresh air breathing. Allow the victim to rest.

Skin contact : Remove affected clothing and wash all exposed skin area plenty of water. **Eye contact** : Rinse immediately with plenty of water. Obtain medical attention if pain,

blinking or redness persists.

Ingestion: Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth.

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 2.2) and/or in section 11

4.3. Indication of any immediate medical attention and special treatment needed

No information available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Foam, Dry powder, Carbon dioxide. Water spray, Sand.

Unsuitable extinguishing media: Do not use a heavy water stream.

Surrounding fires : Use water spray or fog for cooling exposed containers

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas

5.3 Advice for firefighters

Protection against fire: Do not enter fire area without proper protective equipment,

including respiratory protection.

Special procedures: Exercise caution when fighting any chemical fire. Avoid (reject)

fire- fighting water to enter environment.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures



Revised edition no: 0

Date: 25 / 11 / 2015

Supersedes: 0 / 0 / 0

6357P

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For emergency responders: Equip cleanup crew with proper protection. Ventilate area.

For non-emergency personnel: Evacuate unnecessary personnel.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling: Wash hands and other exposed areas with mild soap and water

before eat, drink or smoke and when leaving work.

Technical protective measures: Provide good ventilation in process area to prevent

formation of vapour.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Keep only in the original container in a cool, well ventilated

place. Keep container closed when not in use. Recommended storage temperature: 2 - 8 °C

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3 Specific end uses

No data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

No data available.

8.2 Exposure controls

Engineering measures



Revised edition no: 0

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Supersedes: 0 / 0 / 0

6357P

2,2,2-Trichloroethyl chloroformate

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Technical measures & appropriate working operations should be given priority over the use of personal protective equipments.

Individual protection measures

Personal protection : Avoid all unnecessary exposure.

Respiratory protection : Wear approved mask.Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.
Others : When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance Form : Liquid

b) Colour : Clear light yellow color liquid

c) Odour : Odourless

c) Odour Threshold : No data available d) pH : No data available e) Melting point : No data available

f) Boiling point / : 171-172°C

Boiling range

g) Flash point : No data available
h) Evaporation rate : No data available
i) Flammability (solid, gas) : No data available

j) Upper/lower flammability or

explosive limits

Upper explosion limit : No data available
Lower explosion limit : No data available
k) Vapour pressure : No data available
l) Vapour density : No data available
m) Relative density : 1.539 g/cm3 at 25 °C
n) Water solubility : No data available
o) Partition coefficient : No data available

n-Octanol/water

p) Autoignition temperature : No data available
q) Decomposition temperature : No data available
r) Viscosit : No data available
s) Explosive properties : No data available
t) Oxidizing properties : No data available

9.2 Other safety information



Revised edition no: 0

Date: 25 / 11 / 2015

Supersedes: 0 / 0 / 0

2,2,2-Trichloroethyl chloroformate

6357P

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight

10.5 Incompatible materials

Oxidizing agents, Alkali metals, Powdered metals, Ammonia, Organic materials, Peroxides

10.6 Hazardous decomposition products

No data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: No data available

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available **Respiratory or skin sensitization:** No data available

Germ cell mutagenicity: No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available **Specific target organ toxicity - repeated exposure:** No data available

Aspiration hazard: No data available

Additional Information



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6357P

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RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Biodegradable

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical as safety assessments not required / not conducted.

12.6 Other adverse effects

No ecological problems are to be expected when the product is handled and used with due care and attention.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

General: Avoid release to the environment. Dispose in a safe manner in

accordance with local/national regulations.

14. TRANSPORT INFORMATION

14.1. Land transport (ADR-RID)

Proper shipping name : CHLOROFORMATES, TOXIC, CORROSIVE, N.O.S. (2,2,2-Trichloroethyl

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UN N° : 3277 ADR – Class : 6.1(8)

Labelling - Transport : 6.1 : Toxic substances. 8: Corrosive substance.

ADR – Group : II

14.2. Sea transport (IMDG) [English only]

Proper shipping name: CHLOROFORMATES, TOXIC, CORROSIVE, N.O.S. (2,2,2-Trichloroethyles)

chloroformate)

UN N° : 3277 ADR – Class : 6.1(8)

IMO-IMDG - Class : 6.1 : Toxic substances. 8: Corrosive substance.

or division

IMO-IMDG - : II

Packing group

IMO-IMDG - : No

Marine pollution

14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name: CHLOROFORMATES, TOXIC, CORROSIVE, N.O.S. (2,2,2-Trichloroethyl

chloroformate)

UN N° : 3277

IATA - Class or division: 6.1: Toxic substances. 8: Corrosive substance.

IATA - Packing group : II

IATA - Passenger and : ALLOWED

Cargo Aircraft

15. REGULATORY INFORMATION

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

Safety, health and environmental : Ensure all national/local regulations are observed.

regulations/legislation specific for the

substance or mixture

REACH Restrictions - Annex XVII : The components of this product are not subject to

restrictions.

REACH Authorisation - Annex XIV : The components of this product are not subject to

authorization.

15.2. Chemical Safety Assessment

For this product chemical safety assessment was not carried out.



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6357P

16. OTHER INFORMATION

Revision : Revision - See: *

Abbreviations and acronyms: PBT: persistent, bioaccumulative and toxic.

vPvB: very persistent and very bioaccumulative

Sources of key data used : REGULATION (EC) No 1272/2008 OF THE EUROPEAN

PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending

Regulation (EC) No 1907/2006.

List of relevant R phrases (heading 3): R23 : Toxic by inhalation.

R34: Causes burns.

List of full text of H-statements in: Acute Tox. Acute toxicity

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled. Skin Corr. Skin corrosion

Section 3

Further information : None.

In accordance with REACH Regulation (CE) Nº 1907/2006 and with CLP Regulation (CE) Nº 1272/2008
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