

OTTO CHEMIE PVT LTD

An ISO 9001 : 2015 & GMP Certified Company
101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate,
Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841
Email : info@ottokemi.com Web : www.ottokemi.com

Creation Date: 10-03-2025

Revision Date: 29-07-2030

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1. Product identifiers

Product name: Phosphorous oxychloride, 98%
Product Code: P 1755
CAS No : 10025-87-3

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification
OTTO CHEMIE PVT LTD
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,
Chinchpada, Vasai East, Waliv, Maharashtra 401208.
Email info@ottokemi.com

1.4. Emergency telephone number

Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Acute toxicity, (Category 4)

Acute toxicity, (Category 2)

Skin corrosion, (Sub-category
1A)

Serious eye damage, (Category
1)

Specific target organ toxicity -
repeated exposure, (Category 1),
Respiratory Tract

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Hazard Statements

H302

H314

H330

H372

Precautionary Statements

P280

P301 + P312

P303 + P361 + P353

P304 + P340 + P310

P305 + P351 + P338

P314

Supplemental Hazard information (EU)

EUH014

H302: Harmful if swallowed.

H330: Fatal if inhaled.

H314: Causes severe skin burns and eye
damage.

H318: Causes serious eye damage.

H372: Causes damage to organs through
prolonged or repeated exposure if inhaled.

Danger

Harmful if swallowed.

Causes severe skin burns and eye damage.

Fatal if inhaled.

Causes damage to organs (Respiratory Tract) through
prolonged or repeated exposure if inhaled.

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

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel
unwell.

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

IF INHALED: Remove person to fresh air and keep comfortable
for breathing. Immediately call a POISON CENTER/ doctor.

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

Get medical advice/ attention if you feel unwell.

Reacts violently with water.

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EUH029
Reduced Labeling (<= 125 ml)
Pictogram
Signal Word
Hazard Statements
H330
H372

H314
Precautionary Statements
P280

P303 + P361 + P533

P304 + P340 + P310

P305 + P351 + P338

P314
Supplemental Hazard information (EU)
EUH014
EUH029
2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Ecological information:
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Toxicological information:
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Reacts violently with water., Lachrymator.

Contact with water liberates toxic gas.

Danger

Fatal if inhaled.
Causes damage to organs through prolonged or repeated exposure if inhaled.
Causes severe skin burns and eye damage.

Wear protective gloves/ protective clothing/ eye protection/ face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Get medical advice/ attention if you feel unwell.

Reacts violently with water.
Contact with water liberates toxic gas.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : Phosphorus(V) oxide chloride
Phosphoryl chloride
Formula : Cl₃OP
Molecular weight : 153,33 g/mol
CAS-No. : 10025-87-3
EC-No. : 233-046-7

Component	Classification	Concentration
phosphoryl trichloride		
CAS-No. 10025-87-3 EC-No. 233-046-7	Acute Tox. 4; Acute Tox. 2; Skin Corr. 1A; Eye Dam. 1; STOT RE 1; H302, H330, H314, H318, H372	<= 100 %

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

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately

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apply artificial respiration, if necessary also oxygen.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist.

Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

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 data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

Water Foam

5.2 Special hazards arising from the substance or mixture

Oxides of phosphorus

Hydrogen chloride gas

Not combustible.

May not get in touch with: Water

Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Water hydrolyzes material liberating acidic gas which in contact with metal surfaces can generate flammable and/or explosive hydrogen gas. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Keep workplace dry. Do not allow product to come into contact with water.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

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For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store under inert gas.

Tightly closed. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Keep away from water. Never allow product to get in contact with water during storage.

Storage class

Storage class (TRGS 510): 6.1B: Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please

Splash contact

Material: butyl-rubber

Minimum layer thickness: 0,7 mm

Break through time: 120 min

Material tested: Butoject® (KCL 898)

Body Protection

Acid-resistant protective clothing

Respiratory protection

Recommended Filter type: Filter B-(P2)

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state

liquid

b) Color

colorless

c) Odor

odorless

d) Melting

Melting point/range: 1,25 °C

point/freezing point

e) Initial boiling point

105,8 °C

and boiling range

f) Flammability (solid, gas)

No data available

g) Upper/lower

No data available

flammability or explosive limits

h) Flash point

No data available

i) Autoignition temperature

No data available

j) Decomposition temperature

No data available

k) pH

1 at 20 °C

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l) Viscosity

Viscosity, kinematic: No data available

m) Water solubility

Viscosity, dynamic: No data available

n) Partition coefficient:

No data available

n-octanol/water

Not applicable for inorganic substances

o) Vapor pressure

37 hPa at 20 °C

p) Density

1,645 g/mL at 25 °C

Relative density

1,645 at 25 °C

q) Relative vapor

5,29 - (Air = 1.0)

density

r) Particle

No data available

characteristics

s) Explosive properties

No data available

t) Oxidizing properties

none

9.2 Other safety information

Surface tension

32,03 mN/m at 25 °C

Relative vapor

5,29 - (Air = 1.0)

density

SECTION 10: Stability and reactivity

10.1 Reactivity

Reacts violently with water.

Contact with water liberates toxic gas.

10.2 Chemical stability

sensitive to moisture

10.3 Possibility of hazardous reactions

Risk of ignition or formation of inflammable gases or vapours with:

Zinc

carbon disulfide

boron triiodide

Organic Substances

chromyl chloride

A risk of explosion and/or of toxic gas formation exists with the following substances:

Dimethylformamide

Alkali metals

dimethyl sulfoxide

Water

Possible formation of:

Hydrogen chloride gas

phosphine

Violent reactions possible with:

Acetone

10.4 Conditions to avoid

Avoid contact with combustible material (paper, wool, oil).

Moisture.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

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SECTION 12: Ecological information

12.1 Toxicity

Toxicity to daphnia
and other aquatic
invertebrates

static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h
(OECD Test Guideline 202)

Toxicity to algae static test NOEC - Desmodesmus subspicatus (green algae) - 12,5
mg/l - 72 h

(OECD Test Guideline 201)

Toxicity to bacteria EC50 - activated sludge - > 1.000 mg/l - 3 h
(OECD Test Guideline 209)

12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic
substances.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent,
bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at
levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components
considered to have endocrine disrupting properties
according to REACH Article 57(f) or Commission
Delegated regulation (EU) 2017/2100 or Commission
Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

May be harmful to aquatic organisms due to the shift of the pH.

Product reacts with water.

Depending on the concentration, phosphorus compounds may contribute to the
eutrophication of water supplies.

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

No data available

SECTION 14: Transport information

14.1 UN number

ADR/RID: 1810

IMDG: 1810

IATA: 1810

14.2 UN proper shipping name

ADR/RID : PHOSPHORUS OXYCHLORIDE

IMDG : PHOSPHORUS OXYCHLORIDE

IATA : Phosphorus oxychloride

Passenger Aircraft : Not permitted for transport

Cargo Aircraft : Not permitted for transport

14.3 Transport hazard class(es)

ADR/RID: 6.1 (8)

IMDG: 6.1 (8)

IATA: 6.1 (8)

14.4 Packaging group

ADR/RID: I

IMDG: I

IATA: -

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

Tunnel restriction code : (C/D)

Further information : No data available

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SECTION 15: Regulatory information

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

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

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

H2 ACUTE TOXIC

O1 OTHER HAZARDS

O3 OTHER HAZARDS

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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