## 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

### **MATERIAL SAFETY DATA SHEET (MSDS)**

### **SECTION 1. Product identifiers**

Product name: Mercuric chloride, 98%

Product Code: M 1675 CAS No: 7487-94-7

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 2) Skin corrosion, (Sub-category

1B)

Germ cell mutagenicity,

(Category 2)

Reproductive toxicity, (Category

Specific target organ toxicity -

repeated exposure, (Category 1)

Short-term (acute) aquatic

hazard, (Category 1)

Long-term (chronic) aquatic

hazard, (Category 1)

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Hazard Statements

H300

H314 H341

H361f

H372

H410

**Precautionary Statements** 

P260

P273 P280

P303 + P361 + P353

P304 + P340 + P310

P305 + P351 + P338

Supplemental Hazard

H300: Fatal if swallowed.

H314: Causes severe skin burns and eye

damage.

H341: Suspected of causing genetic

defects. H361f: Suspected of damaging fertility.

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

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long

lasting effects.

### Danger

Fatal if swallowed.

Causes severe skin burns and eye damage.

Suspected of causing genetic defects.

Suspected of damaging fertility.

Causes damage to organs through prolonged or repeated

exposure.

Very toxic to aquatic life with long lasting effects.

Do not breathe dust.

Avoid release to the environment.

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.

none

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Danger

exposure.

protection.

rinsing.

none

Fatal if swallowed.

Do not breathe dust.

Causes damage to organs through prolonged or repeated

Wear protective gloves/ protective clothing/ eye protection/ face

IF INHALED: Remove person to fresh air and keep comfortable

IF ON SKIN (or hair): Take off immediately all contaminated

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

Causes severe skin burns and eye damage. Suspected of causing genetic defects.

Suspected of damaging fertility.

clothing. Rinse skin with water.

Statements

Reduced Labeling (<= 125 ml)

Pictogram Signal Word

Hazard Statements

H300

H300 H372

H314

H341 H361f

**Precautionary Statements** 

P260

P280

P303 + P361 + P353

P304 + P340 + P310

P305 + P351 + P338

Supplemental Hazard Statements

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.

Rapidly absorbed through skin.

## **SECTION 3: Composition/information on ingredients**

3.1 Substances

Synonyms : Mercuric chloride
Formula : Cl2Hg
Molecular weight
CAS-No. : 7487-94-7
EC-No. : 231-299-8

Component	Classification	Concentration
Mercury dichloride	Acute Tox. 2; Skin Corr.	
CAS-No. 7487-94-7	1B; Muta. 2; Repr. 2; STOT RE 1; Aquatic	<= 100 %
EC-No. 231-299-8	Acute 1; Aquatic Chronic 1; H300, H314,	
	H341, H361f, H372, H400, H410 M-	
	Factor - Aquatic Acute: 100 - Aquatic	
	Chronic: 10	

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.

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If inhaled

After inhalation: fresh air. Call in physician.

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 eve contact

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

Remove contact lenses.

If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious), administer activated charcoal (20 - 40 g in a 10% slurry) and consult a doctor as quickly as possible. 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

For this substance/mixture no limitations of extinguishing agents are given

5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas

Mercury/mercury oxides.

Not combustible.

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

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: Avoid generation and inhalation of dusts in all circumstances. 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. Dispose of properly. Clean up affected area. Avoid generation of dusts.

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.

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

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

Light sensitive. Moisture sensitive. Product is sensitive to light and moisture.

Storage class

Storage class (TRGS 510): 6.1A: 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 contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

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 contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 480 min

Material tested:KCL 741 Dermatril® L

Body Protection protective clothing

Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P3

The entrepeneur 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.

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### **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

a) Physical state

b) Color

c) Odor d) Melting

point/freezing point

e) Initial boiling point and boiling range

f) Flammability (solid,

gas)

g) Upper/lower

flammability or

explosive limits

h) Flash point

i) Autoignition

temperature

j) Decomposition temperature

k) pH

I) Viscosity

m) Water solubility

n) Partition coefficient:

n-octanol/water

o) Vapor pressure

p) Density

Relative density

q) Relative vapor

density

r) Particle

characteristics

s) Explosive properties

t) Oxidizing properties

9.2 Other safety information

No data available

## **SECTION 10: Stability and reactivity**

10.1 Reactivity

No data available

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Risk of explosion with:

Fluorine

Alkali metals

hydrazine and derivatives

Exothermic reaction with:

Strong bases

Strong oxidizing agents

10.4 Conditions to avoid

Avoid moisture. Light.

no information available

10.5 Incompatible materials

Lead, Copper, Light metals, silver, Zinc, Tin

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:

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solid

No data available No data available

Melting point/range: 277 °C - lit.

302 °C at 1.013 hPa

No data available

No data available

Not applicable No data available

No data available

No data available

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

No data available No data available

1,7 hPa at 236 °C

5,440 g/cm3 No data available

No data available

No data available

No data available

none

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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.

### **SECTION 12: Ecological information**

12.1 Toxicity

Toxicity to fish mortality LOEC - Lates calcarifer - 0,113 mg/l - 96,0 h LC50 - Oncorhynchus mykiss (rainbow trout) - 0,016 mg/l - 96,0 h

Toxicity to daphnia and other aquatic

invertebrates

EC50 - Daphnia magna (Water flea) - 0,002 mg/l - 48 h

Toxicity to algae Growth inhibition EC50 - Ditylum brightwellii - 0,01 mg/l - 5 d

Toxicity to daphnia and other aquatic invertebrates(Chronic

toxicity)

mortality LOEC - Daphnia magna (Water flea) - 0,006 mg/l - 21 d mortality NOEC - Daphnia magna (Water flea) - 0,003 mg/l - 21 d

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Bioaccumulation Pimephales promelas (fathead minnow) - 0,50 μg/l(Mercury

dichloride)

Bioconcentration factor (BCF): 5.680

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

No data available

## **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

No data available

### **SECTION 14: Transport information**

14.1 UN number

ADR/RID: 1624 IMDG: 1624 IATA: 1624

14.2 UN proper shipping name

ADR/RID : MERCURIC CHLORIDE IMDG : MERCURIC CHLORIDE IATA : Mercuric chloride

14.3 Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1 14.4 Packaging group IMDG: II IMDG: II IATA: II

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14.5 Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

14.6 Special precautions for user

Tunnel restriction code : (D/E)

Further information : No data available

**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.

Authorisations and/or restrictions on use REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

(Annex XVII)

: Mercury dichloride

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

E1 ENVIRONMENTAL 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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