



# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : M 12017  
Product Name : MERCUROUS CHLORIDE ( CALOMEL )

### Manufacturer/supplier identification

Company : NICE Chemicals (P) Ltd., Cochin, India  
Tel - 0484 2800212, 2802755

Contact for information : Tel. No.- 0484 2802536 Fax : 0484 2802483  
Emergency Telephone No. : 0484 2801583 Tele fax No. : 0484 2802483

---

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Calomel

CAS-No : 10112-91-1 Ec-Index No. : 080-003-00-1  
Molar Mass : 472.09 EC-No. : 233-307-5  
Molecular Formula :  $\text{Cl}_2 \text{Hg}_2$

---

3. HAZARDS IDENTIFICATION : Harmful if swallowed. Irritating to eyes, respiratory system and skin.

---

4. FIRST AID MEASURES : After skin contact : Wash off with plenty of water.

Remove contaminated clothing.

After eye contact : Rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Immediately summon eye specialist.

After inhalation : Fresh air. If necessary, apply mouth to mouth resuscitation or mechanical ventilation. Immediately summon doctor.

After swallowing : If victim is still conscious, make him drink plenty of water, induce vomiting, administer activated charcoal (20-40 g in 10% slurry). Immediately summon doctor.

---



## SAFETY DATA SHEET

---

**Catalogue No.** : M 12017  
**Product Name** : MERCUROUS CHLORIDE ( CALOMEL )

---

**5. FIRE-FIGHTING MEASURES** : Suitable extinguishing media: In adaption to materials stored in the immediate neighbourhood.

Special risks : Development of hazardous combustion gases or vapours possible in the event of fire. The following may develop in event of fire : Mercury vapours, Chlorine, Hydrochloric acid.

Special protective equipment for fire fighting : Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

Other information : Non-combustible.

---

### 6. ACCIDENTAL RELEASE MEASURES

Person related precautionary measures: Avoid generation of dusts. Do not inhale dusts. Avoid substance contact.

Procedures for cleaning/absorption : Carefully take up dry. Forward for disposal. Clean up affected area. Avoid generation of dusts.

Environmental-protection measures :  
Do not allow to enter sewerage system.

---

**7. HANDLING AND STORAGE** : Handling : No further requirements.

Storage : Tightly closed. Dry. In a well-ventilated place.

Protected from light.

Storage temperature : No restrictions.

Accessible only for authorised persons.

---

### 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Specific control parameter : (max. workplace conc.)

Mercury (metallic mercury & Inorganic mercury compounds)

0.012 ml/m<sup>3</sup> or 0.1 mg/m<sup>3</sup>



# SAFETY DATA SHEET

---

**Catalogue No.** : M 12017  
**Product Name** : MERCUROUS CHLORIDE ( CALOMEL )

---

Respiratory protection : Required when dusts are generated.

Eye Protection : Required

Hand Protection : Required

Industrial hygiene : Change contaminated clothing. Application of skin-protective barrier cream recommended. Wash hands after working with substance. Under no circumstances eat or drink at work place.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                             |   |                          |
|-----------------------------|---|--------------------------|
| Form                        | : | Solid                    |
| Colour                      | : | White                    |
| Odour                       | : | Odourless                |
| pH value                    | : | Not available            |
| Melting temperature         | : | Not available            |
| Boiling temperature         | : | Not available            |
| Sublimation point           | : | ~ 400 – 500° C           |
| Ignition temperature        | : | Not available            |
| Flash Point                 | : | Not available            |
| Explosion limit lower       | : | Not available            |
| upper                       | : | Not available            |
| Vapour pressure ( 120° C)   | : | ~ 0.015 hPa              |
| (50° C)                     | : | 0.0003 Pa                |
| Relative vapour density     | : | Not available            |
| Density                     | : | Not available            |
| Bulk density                | : | ~ 1200 Kg/m <sup>3</sup> |
| Solubility in Water (20° C) | : | 0.0023 gm/lt.            |

---

**10. STABILITY & REACTIVITY** : Conditions to be avoided : Strong heating

Substances to be avoided : Fluorine & alkali metals.

Hazardous decomposition products : In the event of fire:

Mercury vapours, Chlorine, Hydrochloric acid.



# SAFETY DATA SHEET

---

|                      |   |                                       |
|----------------------|---|---------------------------------------|
| <b>Catalogue No.</b> | : | <b>M 12017</b>                        |
| <b>Product Name</b>  | : | <b>MERCUROUS CHLORIDE ( CALOMEL )</b> |

---

Further information : Light-sensitive.

---

## 11. TOXICOLOGICAL INFORMATION

Acute Toxicity : LD<sub>50</sub> (oral, rat) : 210 mg/Kg :

Further toxicological Information : Inorganic mercury (I) compounds are -

due to their poor solubility - less toxic after oral uptake than are the more soluble mercury (II) compounds. A relatively long residence time in the gastro intestinal tract may lead to oxidation to the bivalent form Hg compounds take their effect in case of intoxication as cellular and proto-plasma toxins.

Symptoms of Mercury intoxication : acute : contact with the eye leads to severe lesions. Swallowing and inhalation of dusts are followed by lesions of the mucous membranes in the gastro- intestinal and respiratory tracts (metallic taste, nausea, vomiting, abdominal pain, bloody diarrhea, intestinal burns, oedema of the glottis, aspiration pneumonia); drop in blood pressure, cardiac dysrhythmias, circulatory collapse, and renal failure;chronic: stomatitis with loss of teeth and mercurial line. The main manifestations are in the CNS (impaired speaking, vision, hearing and sensation, loss of memory, irritability, hallucinations, delirium i.a.)

Further Data : Further hazardous properties cannot be excluded. The product should be handled with the care usual when dealing with chemicals.

---

## 12. ECOLOGICAL INFORMATION

Behavior in environmental compartments :

Evaluation number (FRG) (bacteria) : 7.9

Evaluation number (FRG) (fish) : 6.2



# SAFETY DATA SHEET

---

**Catalogue No.** : **M 12017**  
**Product Name** : **MERCUROUS CHLORIDE ( CALOMEL )**

---

Evaluation number (FRG) (mammal) : 5

Ecotoxic effects :

Biological effects : Toxic for aquatic organisms.

Protozoa : LC<sub>50</sub>: >200 mg/lit.

The following applies to the water - soluble matter contained in inorganic Hg compounds in general (tested with Mercury (II) Chloride : Leuciscus idus LC<sub>50</sub> : 0.5 mg/lit. (48h), Daphnia magna EC<sub>50</sub> : 0.005-3, 6mg/lit.(48h), Chlorella pyrenoidosa EC<sub>50</sub> : 0.3 mg/lit (5h), Pseudomonas fluorescens IC<sub>50</sub> : 0.005 mg/lit. The toxicity of Mercury(II) ions for water organisms depends on the water hardness [source : IPCS]

---

### 13. DISPOSAL METHOD

There are no uniform EC regulation for the disposal of chemicals/residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Disposal in compliance with official regulations. Handle contaminated packing in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

---

### 14. TRANSPORT INFORMATION

Transport over land

ADR/RID & GGVS/GGVE : GGVS/GGVE class : 9      Number and letter : 12c  
ADR/RID class : 9      Number and letter : 12c  
Name of material : MERCUROUS CHLORIDE (CALOMEL)



# SAFETY DATA SHEET

---

**Catalogue No.** : **M 12017**  
**Product Name** : **MERCUROUS CHLORIDE ( CALOMEL )**

---

Sea Transport IMDG : IMDG class : 9 UN No. : 3077 Packing group : III  
Ems : MFAG : 4.2  
Correct Technical Name : MERCURY (I) CHLORIDE

Air Transport ICAO-TI  
and IATA-DGR : ICAO/IATA class 9 UN No. : 3077  
Packaging group III  
Correct Technical Name : MERCURY (I) CHLORIDE

---

## 15. REGULATORY INFORMATION

Labeling according to EC Directives

Symbol : Xn Harmful  
R-phrases : 22-36/37/38 Harmful if swallowed, Irritating to eyes,  
respiratory system and skin.

S-phrases : 13-24/25-46 Keep away from food, drink and animal feeding  
stuffs. Avoid contact with skin and eyes. If  
swallowed, seek medical advice immediately and  
show this container or label.

EC-No. : 233-307-5 EC label  
Water pollution class : 3 (highly polluting substance)

---

## 16. OTHER INFORMATION

Reason for alteration

Change in transport classification.

The information contained herein is based on the present state of our knowledge.  
It characterises the product with regard to the appropriate safety precautions. It  
does not represent a guarantee of the properties of the product.

---