



# MATERIAL SAFETY DATA SHEET SDS/MSDS

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

Product name : **Mercuric Nitrate Monohydrate**

CAS-No. : 7783-34-8

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

### 1.3 Details of the supplier of the safety data sheet

Company Bio-Chem Chemicals  
5455 Nicholson Road, Science Market  
Ambala Cantt, 133001 - Haryana  
+91 82952 41953  
info@biofinechemical.com - www.biofinechemical.com

### 1.4 Emergency telephone number

Emergency Phone # +91 99921 51495 (10.00am - 06.30pm) (Office Hours)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No

**1272/2008** Acute toxicity, Oral (Category 2), H300

Acute toxicity, Inhalation (Category 2), H330

Acute toxicity, Dermal (Category 1), H310

Specific target organ toxicity - repeated exposure (Category 2), H373

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

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

### 2.2 Label elements

#### Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word

Danger

Hazard statement(s)	
H300 + H310 + H330	Fatal if swallowed, in contact with skin or if inhaled
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)	
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves/ protective clothing.
P301 + P330 + P331 + P310	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/ physician.
P302 + P352 + P310	IF ON SKIN: Wash with plenty of water. Immediately call a POISON CENTER or doctor/ physician.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
Supplemental Hazard Statements	none

### 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.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Synonyms	: Mercuric nitrate
Formula	: HgN <sub>2</sub> O <sub>6</sub> · H <sub>2</sub> O
Molecular weight	: 342,62 g/mol
CAS-No.	: 7783-34-8
EC-No.	: 233-152-3
Index-No.	: 080-002-00-6

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
<b>Mercury dinitrate monohydrate</b>		
CAS-No.	7783-34-8	<= 100 %
EC-No.	233-152-3	
Index-No.	080-002-00-6	
	Acute Tox. 2; Acute Tox. 1; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H300, H330, H310, H373, H400, H410	
	Concentration limits: >= 0,1 %: STOT RE 2, H373;	
	M-Factor - Aquatic Acute: 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

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**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 water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**

Nitrogen oxides (NO<sub>x</sub>), Mercury/mercury oxides.

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

No data available

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

**6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

**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****Components with workplace control parameters**

## 8.2 Exposure controls

### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

### Personal protective equipment

#### Eye/face protection

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

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Appearance	Form: crystalline Colour: white
b) Odour	No data available
c) Odour Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	Melting point/range: 79 °C - lit.
f) Initial boiling point and boiling range	No data available
g) Flash point	Not applicable
h) Evaporation rate	No data available
i) Flammability (solid, gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	4,300 g/cm <sup>3</sup>
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available

- |                              |                   |
|------------------------------|-------------------|
| p) Auto-ignition temperature | No data available |
| q) Decomposition temperature | No data available |
| r) Viscosity                 | No data available |
| s) Explosive properties      | No data available |
| t) Oxidizing properties      | No data available |

## 9.2 Other safety information

No data available

## SECTION 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

Avoid moisture.

### 10.5 Incompatible materials

No data available

### 10.6 Hazardous decomposition products

Other decomposition products - No data available  
In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

No data available

Inhalation: No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Mercury dinitrate monohydrate)

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

No data available

**Additional Information**

RTECS: OW 8225000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

**SECTION 12: Ecological information****12.1 Toxicity**

No data available

**12.2 Persistence and degradability**

No data available

**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 Other adverse effects**

Very toxic to aquatic life with long lasting effects.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport****information 14.1 UN number**

ADR/RID: 1625

IMDG: 1625

IATA: 1625

**14.2 UN proper shipping name**ADR/RID: MERCURIC  
NITRATE

IMDG: MERCURIC

NITRATE

IATA: Mercuric nitrate

IMDG: 6.1

IATA: 6.1

**14.3 Transport hazard class(es)**

ADR/RID: 6.1

IMDG: II

IATA: II

**14.4 Packaging group**

ADR/RID: II

IMDG Marine pollutant: yes

IATA: no

**14.5 Environmental hazards**

ADR/RID: yes

**14.6 Special precautions for user**

No data available

**SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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

Mercury dinitrate monohydrate CAS-No.: 7783-34-8

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)

Shall not be placed on the market, or used, as a substance or in mixtures See

Annex XVII to Regulation (EC) no 1907/2006 for Conditions of restriction

Mercury dinitrate monohydrate CAS-No.: 7783-34-8

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

Countries for which no notification is required: Please refer to PIC circular at [www.pic.int/](http://www.pic.int/)

Mercury dinitrate monohydrate CAS-No.: 7783-34-8

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

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Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

Countries for which no notification is required: Please refer to PIC circular at [www.pic.int/](http://www.pic.int/)

### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

### SECTION 16: Other information

#### Full text of H-Statements referred to under sections 2 and 3.

H300	Fatal if swallowed.
H300 + H310 + H330	Fatal if swallowed, in contact with skin or if inhaled
H310	Fatal in contact with skin.
H330	Fatal if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

#### Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.