

**Mercurous Nitrate Dihydrate**  
**CAS No 14836-60-3****MATERIAL SAFETY DATA SHEET**  
**SDS/MSDS****1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifiers**Product name : **Mercurous Nitrate Dihydrate**

CAS-No. : 14836-60-3

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

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

**1.3 Details of the supplier of the safety data sheet**Company : Pallav Chemicals & Solvents Pvt. Ltd  
253, Shiv Shakti Industrial Estate, Opp Mittal Estate  
Andheri Kurla Road, Andheri (E), Mumbai - 400050  
INDIA

Telephone : +91 22 4928 4000

Email : [sales@pallavchemicals.com](mailto:sales@pallavchemicals.com)**1.4 Emergency telephone number**

Emergency Phone # : +91 22 4928 4000 (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 2)

Acute toxicity, Dermal (Category 1)

Acute toxicity, Oral (Category 2)

Specific target organ toxicity - repeated exposure (Category 2)

Acute aquatic toxicity (Category 1)

Chronic aquatic toxicity (Category 1)

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

Very toxic by inhalation, in contact with skin and if swallowed. Danger of cumulative effects. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**2.2 Label elements****Labelling according Regulation (EC) No 1272/2008 [CLP]**

Pictogram

Signal word : Danger

Hazard statement(s)

H300

Fatal if swallowed.

H310

Fatal in contact with skin.

H330	Fatal 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.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing.
P284	Wear respiratory protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
Supplemental Hazard Statements	none

**According to European Directive 67/548/EEC as amended.**

Hazard symbol(s)



R-phrases(s)

R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed.
R33	Danger of cumulative effects.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases(s)

S13	Keep away from food, drink and animal feedingstuffs.
S28	After contact with skin, wash immediately with plenty of soap and water. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S45	This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/ Safety data sheets.

**2.3 Other hazards - none**

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Synonyms : Mercurous nitrate

Formula :  $\text{Hg}_2\text{N}_2\text{O}_6 \cdot 2\text{H}_2\text{O}$

Molecular Weight : 561,22 g/mol

Component	Concentration
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**Dimercy dinitrate dihydrate**

CAS-No.	14836-60-3	-
EC-No.	233-886-4	
Index-No.	080-002-00-6	

**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**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., prolonged or repeated exposure can cause:, Neurotoxic effects.

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

no data available

**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 (NOx), Mercury/mercury oxides.

**5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**5.4 Further information**

no data available

**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**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.

**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.

**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 uses**

no data available

**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).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- |   |                                 |
|---|---------------------------------|
| a) Appearance                                   | Form: crystalline               |
| b) Odour  | no data available               |
| c) Odour Threshold                              | no data available               |
| d) pH   | no data available               |
| e) Melting point/freezing point                 | Melting point/range: 70 °C      |
| 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                             | 4,78 g/cm <sup>3</sup> at 25 °C |
| n) Water solubility                             | no data available               |
| o) Partition coefficient: n-octanol/water       | no data available               |
| p) Autoignition 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

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

no data available

**10.2 Chemical stability**

no data available

**10.3 Possibility of hazardous reactions**

no data available

**10.4**

Avoid moisture. Light.

**Conditions to avoid**

**10.5 Incompatible materials**

Strong reducing agents

**10.6 Hazardous decomposition products**

Other 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: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Dimercury dinitrate dihydrate)

**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

**Potential health effects**

**Inhalation**

May be fatal if inhaled. May cause respiratory tract irritation.

**Ingestion**

May be fatal if swallowed.

**Skin**

May be fatal if absorbed through skin. May cause skin irritation.

**Eyes**

May cause eye irritation.

**Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., prolonged or repeated exposure can cause:, Neurotoxic effects.

**Additional Information**

RTECS: Not available

## 12. ECOLOGICAL

### INFORMATION 12.1 Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 0,033 mg/l - 96,0 h

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 0,005 mg/l - 48 h

### 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

no data available

### 12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

## 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.

## 14. TRANSPORT INFORMATION

### 14.1 UN number

ADR/RID: 1627

IMDG: 1627

IATA: 1627

### 14.2 UN proper shipping name

ADR/RID: MERCUROUS NITRATE

IMDG: MERCUROUS NITRATE

IATA: Mercurous nitrate

### 14.3 Transport hazard class(es)

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

### 14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

### 14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: no

### 14.6 Special precautions for user

no data available

## 15. REGULATORY INFORMATION

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

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

no data available

### 15.2 Chemical Safety Assessment

no data available

## **16. OTHER INFORMATION**

### **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. Pallav Chemicals & Solvents Pvt. Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.pallavchemicals.com](http://www.pallavchemicals.com) for additional terms and conditions of sale.