

# NICKEL ACETATE (TETRAHYDRATE) EXTRA PURE MSDS

CAS No: 608-89-9 MSDS

## MATERIAL SAFETY DATA SHEET (MSDS)

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

#### 1.1. Product identifier

|                    |                                                                                                                                     |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Product form       | : Substance                                                                                                                         |
| CAS No             | : 608-89-9                                                                                                                          |
| Product code       | : 04864                                                                                                                             |
| Chemical structure | : $\left[ \text{H}_3\text{C}-\overset{\text{O}}{\parallel}{\text{C}}-\text{O}^- \right]_2 \text{Ni}^{2+} \cdot 4\text{H}_2\text{O}$ |
| Synonyms           | : Acetic acid nickel(II) salt                                                                                                       |

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

##### 1.2.2. Uses advised against

No additional information available

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

LOBA CHEMIE PVT.LTD.  
107 Wode House Road, Jehangir Villa, Colaba  
400005 Mumbai - INDIA  
T +91 22 6663 6663 - F +91 22 6663 6699  
[info@lobachemie.com](mailto:info@lobachemie.com) - [www.lobachemie.com](http://www.lobachemie.com)

#### 1.4. Emergency telephone number

Emergency number : + 91 22 6663 6663 (9:00am - 6:00 pm)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

|                                            |       |
|--------------------------------------------|-------|
| Acute toxicity (oral), Category 4          | H302  |
| Acute toxicity (inhalation:gas) Category 4 | H332  |
| Sensitisation — Respiratory, category 1    | H334  |
| Sensitisation — Skin, category 1           | H317  |
| Germ cell mutagenicity, Category 2         | H341  |
| Carcinogenicity (inhalation) Category 1B   | H350i |
| Reproductive toxicity, Category 1B         | H360  |

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Specific target organ toxicity — Repeated exposure, Category 1 H372  
Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410

Full text of classification categories and H statements : see section 16

### Classification according to Directive 67/548/EEC or 1999/45/EC

Carc.Cat.1; R49  
R43  
N; R50  
R48

Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

:



GHS07



GHS08



GHS09

Signal word (CLP)

: Danger

Hazard statements (CLP)

: H302+H332 - Harmful if swallowed or if inhaled  
H317 - May cause an allergic skin reaction  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H341 - Suspected of causing genetic defects  
H350i - May cause cancer by inhalation  
H360 - May damage fertility or the unborn child  
H372 - Causes damage to organs through prolonged or repeated exposure  
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP)

: P201 - Obtain special instructions before use  
P273 - Avoid release to the environment  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P308+P313 - IF exposed or concerned: Get medical advice/attention  
P501 - Dispose of contents/container to ...

## 2.3. Other hazards

No additional information available

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Name : NICKEL ACETATE (TETRAHYDRATE) EXTRA PURE  
CAS No : 608-89-9

Full text of R- and H-phrases: see section 16

#### 3.2. Mixture

Not applicable

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.  
First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.  
First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.  
First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : May cause an allergic skin reaction. Suspected of causing genetic defects. May damage fertility. May damage the unborn child. Causes damage to organs through prolonged or repeated exposure.  
Symptoms/injuries after inhalation : Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause cancer by inhalation.  
Symptoms/injuries after ingestion : Harmful if swallowed.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>).  
Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.  
Emergency procedures : Ventilate area.

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### 6.2. Environmental precautions

Very toxic to aquatic life with long lasting effects.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clear up rapidly by scoop or vacuum.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid breathing dust/fume/gas/mist/vapours/spray. Do not breathe dust/fume/gas/mist/vapours/spray.

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash ... thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container tightly closed. Store in a dry place.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Hand protection : protective gloves

Eye protection : Chemical goggles or safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : Wear respiratory protection

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Molecular mass : 248.84 g/mol

Colour : Green crystalline.

Odour : acetic acid odour.

Odour threshold : No data available

pH : No data available

Relative evaporation rate (butylacetate=1) : No data available

Melting point : No data available

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|                                  |                           |
|----------------------------------|---------------------------|
| Freezing point                   | : No data available       |
| Boiling point                    | : No data available       |
| Flash point                      | : No data available       |
| Auto-ignition temperature        | : No data available       |
| Decomposition temperature        | : No data available       |
| Flammability (solid, gas)        | : No data available       |
| Vapour pressure                  | : No data available       |
| Relative vapour density at 20 °C | : No data available       |
| Relative density                 | : No data available       |
| Density                          | : 1.798 g/cm <sup>3</sup> |
| Solubility                       | : Water: Soluble in water |
| Log Pow                          | : No data available       |
| Viscosity, kinematic             | : No data available       |
| Viscosity, dynamic               | : No data available       |
| Explosive properties             | : No data available       |
| Oxidising properties             | : No data available       |
| Explosive limits                 | : No data available       |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Direct sunlight. Air contact. Moisture.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Inhalation:gas: Harmful if inhaled.

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|                                                    |                                                                                                                   |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Skin corrosion/irritation                          | : Not classified                                                                                                  |
| Serious eye damage/irritation                      | : Not classified                                                                                                  |
| Respiratory or skin sensitisation                  | : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. |
| Germ cell mutagenicity                             | : Suspected of causing genetic defects.                                                                           |
| Carcinogenicity                                    | : May cause cancer by inhalation.                                                                                 |
| Reproductive toxicity                              | : May damage fertility or the unborn child.                                                                       |
| Specific target organ toxicity (single exposure)   | : Not classified                                                                                                  |
| Specific target organ toxicity (repeated exposure) | : Causes damage to organs through prolonged or repeated exposure.                                                 |
| Aspiration hazard                                  | : Not classified                                                                                                  |

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water : Very toxic to aquatic life.

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose of contents/container to ...

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

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## Safety Data Sheet

### 14.1. UN number

|               |        |
|---------------|--------|
| UN-No. (ADR)  | : 3077 |
| UN-No. (IMDG) | : 3077 |
| UN-No.(IATA)  | : 3077 |
| UN-No.(ADN)   | : 3077 |
| UN-No. (RID)  | : 3077 |

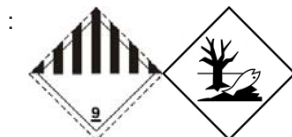
### 14.2. UN proper shipping name

|                                       |                                                                                        |
|---------------------------------------|----------------------------------------------------------------------------------------|
| Proper Shipping Name (ADR)            | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.                                   |
| Proper Shipping Name (IMDG)           | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.                                   |
| Proper Shipping Name (IATA)           | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.                                   |
| Proper Shipping Name (ADN)            | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.                                   |
| Proper Shipping Name (RID)            | : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.                                   |
| Transport document description (ADR)  | : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, (E)              |
| Transport document description (IMDG) | : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III, MARINE POLLUTANT |
| Transport document description (IATA) | : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III                   |
| Transport document description (ADN)  | : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III                   |
| Transport document description (RID)  | : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III                   |

### 14.3. Transport hazard class(es)

#### ADR

|                                  |     |
|----------------------------------|-----|
| Transport hazard class(es) (ADR) | : 9 |
| Danger labels (ADR)              | : 9 |



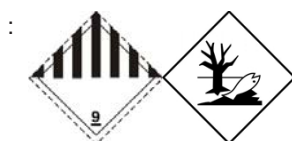
#### IMDG

|                                   |     |
|-----------------------------------|-----|
| Transport hazard class(es) (IMDG) | : 9 |
| Danger labels (IMDG)              | : 9 |



#### IATA

|                                   |     |
|-----------------------------------|-----|
| Transport hazard class(es) (IATA) | : 9 |
| Hazard labels (IATA)              | : 9 |

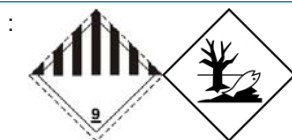


#### ADN

|                                  |     |
|----------------------------------|-----|
| Transport hazard class(es) (ADN) | : 9 |
| Danger labels (ADN)              | : 9 |

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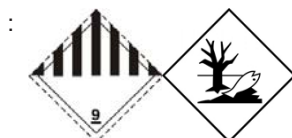
## Safety Data Sheet



### RID

Transport hazard class(es) (RID) : 9

Danger labels (RID) : 9



### 14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

### 14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : M7

Special provision (ADR) : 274, 335, 601, 375

Limited quantities (ADR) : 5kg

Excepted quantities (ADR) : E1

Packing instructions (ADR) : P002, IBC08, LP02, R001

Special packing provisions (ADR) : PP12, B3

Mixed packing provisions (ADR) : MP10

Portable tank and bulk container instructions (ADR) : T1, BK1, BK2

Portable tank and bulk container special provisions (ADR) : TP33

Tank code (ADR) : SGAV, LGBV

Vehicle for tank carriage : AT

Transport category (ADR) : 3

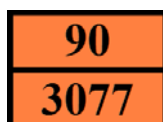
Special provisions for carriage - Packages (ADR) : V13

Special provisions for carriage - Bulk (ADR) : VC1, VC2

Special provisions for carriage - Loading, unloading and handling (ADR) : CV13

Hazard identification number (Kemler No.) : 90

Orange plates :



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Tunnel restriction code (ADR) : E  
EAC code : 2Z

### - Transport by sea

Special provision (IMDG) : 274, 335, 966, 967, 969  
Limited quantities (IMDG) : 5 kg  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P002, LP02  
Packing provisions (IMDG) : PP12  
IBC packing instructions (IMDG) : IBC08  
IBC special provisions (IMDG) : B3  
Tank instructions (IMDG) : T1, BK1, BK2, BK3  
Tank special provisions (IMDG) : TP33  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-F  
Stowage category (IMDG) : A  
Stowage and handling (IMDG) : SW23  
MFAG-No : 171

### - Air transport

PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y956  
PCA limited quantity max net quantity (IATA) : 30kgG  
PCA packing instructions (IATA) : 956  
PCA max net quantity (IATA) : 400kg  
CAO packing instructions (IATA) : 956  
CAO max net quantity (IATA) : 400kg  
Special provision (IATA) : A97, A158, A179, A197  
ERG code (IATA) : 9L

### - Inland waterway transport

Classification code (ADN) : M7  
Special provisions (ADN) : 274, 335, 375, 601  
Limited quantities (ADN) : 5 kg  
Excepted quantities (ADN) : E1  
Carriage permitted (ADN) : T\* B\*\*  
Equipment required (ADN) : PP, A  
Number of blue cones/lights (ADN) : 0

### - Rail transport

Classification code (RID) : M7  
Special provision (RID) : 274, 335, 375, 601  
Limited quantities (RID) : 5kg  
Excepted quantities (RID) : E1  
Packing instructions (RID) : P002, IBC08, LP02, R001  
Special packing provisions (RID) : PP12, B3  
Mixed packing provisions (RID) : MP10  
Portable tank and bulk container instructions (RID) : T1, BK1, BK2  
Portable tank and bulk container special provisions (RID) : TP33  
Tank codes for RID tanks (RID) : SGAV, LGBV  
Transport category (RID) : 3  
Special provisions for carriage – Packages (RID) : W13

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Special provisions for carriage – Bulk (RID) : VC1, VC2  
Special provisions for carriage – Loading and unloading (RID) : CW13, CW31  
Colis express (express parcels) (RID) : CE11  
Hazard identification number (RID) : 90

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

NICKEL ACETATE (TETRAHYDRATE) EXTRA PURE is not on the REACH Candidate List

NICKEL ACETATE (TETRAHYDRATE) EXTRA PURE is not on the REACH Annex XIV List

#### 15.1.2. National regulations

##### Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product  
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

|                               |                                                                   |
|-------------------------------|-------------------------------------------------------------------|
| Acute Tox. 4 (Inhalation:gas) | Acute toxicity (inhalation:gas) Category 4                        |
| Acute Tox. 4 (Oral)           | Acute toxicity (oral), Category 4                                 |
| Aquatic Chronic 1             | Hazardous to the aquatic environment — Chronic Hazard, Category 1 |
| Carc. 1B                      | Carcinogenicity (inhalation) Category 1B                          |

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|               |                                                                           |
|---------------|---------------------------------------------------------------------------|
| Muta. 2       | Germ cell mutagenicity, Category 2                                        |
| Repr. 1B      | Reproductive toxicity, Category 1B                                        |
| Resp. Sens. 1 | Sensitisation — Respiratory, category 1                                   |
| Skin Sens. 1  | Sensitisation — Skin, category 1                                          |
| STOT RE 1     | Specific target organ toxicity — Repeated exposure, Category 1            |
| H302          | Harmful if swallowed                                                      |
| H317          | May cause an allergic skin reaction                                       |
| H332          | Harmful if inhaled                                                        |
| H334          | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| H341          | Suspected of causing genetic defects                                      |
| H350i         | May cause cancer by inhalation                                            |
| H360          | May damage fertility or the unborn child                                  |
| H372          | Causes damage to organs through prolonged or repeated exposure            |
| H410          | Very toxic to aquatic life with long lasting effects                      |
| R43           | May cause sensitisation by skin contact                                   |
| R48           | Danger of serious damage to health by prolonged exposure                  |
| R49           | May cause cancer by inhalation                                            |
| R50           | Very toxic to aquatic organisms                                           |
| N             | Dangerous for the environment                                             |

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*