

# MATERIAL SAFETY DATA SHEET (MSDS)

## **NICKEL CHLORIDE AR (HEXAHYDRATE)**

### 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : NICKEL CHLORIDE AR (HEXAHYDRATE)

Product code : N0143905000

Identification of the product : NICKEL CHLORIDE AR(HEXAHYDRATE) 98%

CAS No: 7791-20-0

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 SUVCHEM

Chaitanya Tower, 2nd Floor, Office # 206,

Siddharth Nagar, S.V. Road,

Goregaon (West), Mumbai - 400062,

Maharashtra, India.

Contact: +91 22 28725393 / 94 / 95

Email ID: info@suvchem.com/care@suvchem.com

1.4. Emergency telephone number

**Phone no.** : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

## 2. Hazards identification -DSD

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

#### Classification EC 67/548 or EC 1999/45

Classification : T; R23/25-R48/23

Xi; R38 Xn ; R42/43 N; R50-53

## Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Health hazards : Specific Target Organ Toxicity - Single exposure - Category 2 - Warning (CLP:

STOT SE 2) H371

Specific Target Organ Toxicity - Repeated exposure - Category 1 - Danger (CLP :

STOT RE 1) H372

Respiratory sensitization - Category 1 - Danger (CLP: Resp. Sens. 1) H334

Skin sensitisation - Category 1 - Warning (CLP : Skin Sens. 1) H317 Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315

Acute toxicity, Inhalation - Category 3 - Danger (CLP: Acute Tox. 3) H331

Acute toxicity, Oral - Category 3 - Danger (CLP: Acute Tox. 3) H301



# MATERIAL SAFETY DATA SHEET (MSDS)

# **NICKEL CHLORIDE AR (HEXAHYDRATE)**

## 2. Hazards identification -DSD (continued)

Environmental hazards : Hazardous to the aquatic environment - Acute hazard - Category 1 - Warning (CLP

: Aquatic Acute 1) H400

Hazardous to the aquatic environment - Chronic hazard - Category 1 - Warning (

CLP: Aquatic Chronic 1) H410

#### 2.2. Label elements

### Labelling EC 67/548 or EC 1999/45

Symbol(s)





Symbol(s) : T : Toxic

N : Dangerous for the environment

R Phrase(s) : R49 : May cause cancer by inhalation.

R61: May cause harm to the unborn child. R23/25: Toxic by inhalation and if swallowed.

R38: Irritating to skin.

R42/43: May cause sensitization by inhalation and skin contact.

R48/23: Toxic: danger of serious damage to health by prolonged exposure

through inhalation.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in

the aquatic environment.

R68 : Possible risks of irreversible effects.

S Phrase(s) : S53 : Avoid exposure - obtain special instructions before use.

S45 : In case of accident or if you feel unwell, seek medical advice immediately (

show the label when possible).

S60: This material and its container must be disposed of as hazardous waste. S61: Avoid release to the environment. Refer to special instructions/Safety data

sheets.

### <u>Labelling Regulation EC 1272/2008 (CLP)</u>

**Hazard pictograms** 







Signal words : Danger

**Hazard statements** : H301 : Toxic if swallowed.

H331 : Toxic if inhaled. H315 : Causes skin irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317: May cause an allergic skin reaction.

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

H371: May cause damage to organs.

H410: Very toxic to aquatic life with long lasting effects.



# MATERIAL SAFETY DATA SHEET (MSDS)

## **NICKEL CHLORIDE AR (HEXAHYDRATE)**

## 2. Hazards identification -DSD (continued)

**Precautionary statements** 

• **Prevention** : P285: In case of inadequate ventilation wear respiratory protection.

P280: Wear protective gloves, protective clothing, eye protection, face protection.

P271: Use only outdoors or in a well-ventilated area.

P260: Do not breathe dust, fume, gas, mist, vapours, spray.

P273: Avoid release to the environment. P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P272: Contaminated work clothing should not be allowed out of the workplace.

: P301+P310: IF SWALLOWED : Immediately call a POISON CENTER or doctor.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P309+P311: IF exposed or if you feel unwell: Call a POISON CENTER or doctor.

P391: Collect spillage.

P304+P340: IF INHALED: Remove to fresh air and keep at rest in a position

comfortable for breathing.

P333+P313: If skin irritation or rash occurs: Get medical advice.

P342+P311: If experiencing respiratory symptoms : Call a POISON CENTER or

doctor.

P363: Wash contaminated clothing before reuse. P314: Get medical advice if you feel unwell.

• **Storage** : P403+P233: Store in well-ventilated place. Keep container tightly closed.

P405: Store locked up.

• **Disposal considerations** : P501: Dispose of this material and its container to hazardous or special waste

collection point, in accordance with local, regional, national and/or international

regulation.

2.3. Other hazards

Response

Other hazards : The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

### 3. Composition/information on ingredients

Substance / Preparation : NICKEL CHLORIDE AR(HEXAHYDRATE) 98%

Substance.

Contains no other components or impurities which will influence the classification of the product.

### 4. First aid measures

#### 4.1. Description of first aid measures

**Inhalation**: Remove to fresh air and keep at rest in a position comfortable for breathing.

Specific treatment (see on this label). Immediately call a POISON CENTER or

doctor. If experiencing respiratory symptoms:



# MATERIAL SAFETY DATA SHEET (MSDS)

# **NICKEL CHLORIDE AR (HEXAHYDRATE)**

## 4. First aid measures (continued)

**Skin contact** : If skin irritation or rash occurs : Wash contaminated clothing before reuse. Wash

with plenty of soap and water. Get medical advice. Specific treatment (see on this

label).

**Eye contact** : Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

Ingestion : Specific treatment (see on this label). Immediately call a POISON CENTER or

doctor. Do NOT induce vomiting. Rinse mouth.

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

**Symptoms relating to use** : Danger of serious damage to health by prolonged exposure through inhalation.

Causes damage to organs through prolonged or repeated exposure.

Swallowing a small quantity of this material will result in serious health hazard.

Causes skin irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction. May cause damage to organs.

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

General information : Never give anything by mouth to an unconscious person. If you feel unwell, seek

medical advice (show the label where possible).

# 5. Fire-fighting measures

## 5.1. Extinguishing media

Suitable extinguishing media

: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media

: Do not use a heavy water stream.

Surrounding fires

: Use water spray or fog for cooling exposed containers.

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

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

5.3. Advice for fire-fighters

**Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory

protection.

**Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to

enter environment.



# MATERIAL SAFETY DATA SHEET (MSDS)

# **NICKEL CHLORIDE AR (HEXAHYDRATE)**

#### 6. Accidental release measures

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

**For emergency responders** : Equip cleanup crew with proper protection.

Ventilate area.

Avoid breathing dust, fume, gas, mist, vapours, spray.

For non-emergency personnel : Evacuate unnecessary personnel.

6.2. Environmental precautions

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters

sewers or public waters.

Avoid release to the environment.

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

**Clean up methods** : On land, sweep or shovel into suitable containers. Store away from other materials.

#### 6.4. Reference to other sections

See section 8. Exposure controls/personal protection

## 7. Handling and storage

### 7.1. Precautions for safe handling

Personal protection : Do not breathe dust, fume, gas, mist, vapours, spray. Wash thoroughly after

handling. Do not eat, drink or smoke when using this product.

Handling : Contaminated work clothing should not be allowed out of the workplace. Do not

breathe dust, fume, gas, mist, vapours, spray. Wash thoroughly after handling. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust, fume, gas, mist, vapours, spray. Use only

outdoors or in a well-ventilated area. Wash thoroughly after handling.

**Technical protective measures**: Provide good ventilation in process area to prevent formation of vapour.

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

**Storage** : Keep only in the original container in a cool, well ventilated place. Keep container

tightly closed.

Storage - away from : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

Specific end use(s) : None.



## MATERIAL SAFETY DATA SHEET (MSDS)

## **NICKEL CHLORIDE AR (HEXAHYDRATE)**

## 8. Exposure controls/personal protection

#### 8.1. Exposure controls

**Personal protection** : Avoid all unnecessary exposure.

• Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Where exposure through inhalation may occur from use, respiratory protection

equipment is recommended.

In case of inadequate ventilation wear respiratory protection.

• Hand protection : Wear protective gloves.

Skin protection
 Eye protection
 Others
 Wear suitable protective clothing.
 Chemical goggles or safety glasses.
 When using, do not eat, drink or smoke.

8.2. Control parameters

Occupational Exposure Limits : No data available.

## 9. Physical and chemical properties

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

Physical state at 20 °C : Solid.

**Colour** : Apple green crystalline

Odour : Odorless

Odour threshold : No data available.

pH value : Not applicable.

Melting point [°C] : 10010C

Decomposition point [°C] : N/A

Critical temperature [°C] : N/A

Auto-ignition temperature [°C] : N/A

Auto-ignition temperature [°C] : N/A
Flammability (solid, gas) : N/A
Flash point [°C] : N/A
Boiling point [°C] : N/A
Initial boiling point [°C] : N/A
Final boiling point [°C] : N/A
Evaporation rate : N/A
Vapour pressure [20°C] : N/A

Vapour pressure mm/Hg : 1 mm Hg @ 6710C

Vapour density : N/A
Density [g/cm3] : 3,55
Relative density, gas (air=1) : N/A



## MATERIAL SAFETY DATA SHEET (MSDS)

## **NICKEL CHLORIDE AR (HEXAHYDRATE)**

## 9. Physical and chemical properties (continued)

Relative density, liquid (water=1) : N/A

Solubility in water [% weight] : 2.54 kg/L @ 200C

Solubility in water : N/A

**Log Pow octanol / water at 20°C**: No data available.

Solubility : 4 Viscosity at 40°C [mm2/s] : N/A

9.2. Other information

Explosive properties : N/A
Explosion limits - upper [%] : N/A
Explosion limits - lower [%] : N/A

Oxidising properties : No data available.

## 10. Stability and reactivity

10.1. Reactivity

Reactivity : Not established.

10.2. Chemical stability

Chemical stability : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

**Hazardous reactions** : Not established.

10.4. Conditions to avoid

Conditions to avoid : Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Materials to avoid : Strong acids. Strong bases.

10.6. Hazardous decomposition products

**Hazardous decomposition products**: Fumes. Carbon monoxide. Carbon dioxide.



# MATERIAL SAFETY DATA SHEET (MSDS)

## **NICKEL CHLORIDE AR (HEXAHYDRATE)**

## 11. Toxicological information

#### 11.1. Information on toxicological effects

**Acute toxicity** 

• Inhalation : Toxic if inhaled.

• **Dermal** : Based on available data, the classification criteria are not met.

• Ingestion : Toxic if swallowed.

**Corrosion** : Based on available data, the classification criteria are not met.

**Irritation** : Causes skin irritation.

Sensitization : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Mutagenicity: Based on available data, the classification criteria are not met.Carcinogenicity: Based on available data, the classification criteria are not met.Toxic for reproduction: Based on available data, the classification criteria are not met.

STOT-single exposure : Causes damage to organ.

**STOT-repeated exposure** : Causes damage to organs through prolonged or repeated exposure. **Aspiration hazard** : Based on available data, the classification criteria are not met.

### 12. Ecological information

### 12.1. Toxicity

**Toxicity information** : Very toxic to aquatic life with long lasting effects.

12.2. Persistence - degradability

Persistence - degradability : May cause long-term adverse effects in the environment.

12.3. Bioaccumulative potential

Bioaccumulative potential : Not established.

12.4. Mobility in soil

Mobility in soil : Not established.

### 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB

substance according to Annex XIII of Regulation REACH.

### 12.6. Other adverse effects



# MATERIAL SAFETY DATA SHEET (MSDS)

## **NICKEL CHLORIDE AR (HEXAHYDRATE)**

## 12. Ecological information (continued)

**Environmental precautions** : Avoid release to the environment.

## 13. Disposal considerations

### 13.1. Waste treatment methods

General : Avoid release to the environment. Dispose in a safe manner in accordance with

local/national regulations.

Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special precautions** : Hazardous waste due to toxicity.

### 14. Transport information

### 14.1. Land transport (ADR-RID)

Proper shipping name : TOXIC SOLID, INORGANIC, N.O.S.

UN N° : 3288 H.I. nr : 60 ADR - Class : 6.1

**Labelling - Transport** : 6.1 : Toxic substances.



ADR - Classification code : T5
ADR - Group : III

ADR - Packing instructions : P002 R001 LP002

ADR - Limited Quantity : 5 KG

ADR - Tunnel code



: E : Passage forbidden through tunnels of category E.

## 14.2. Sea transport (IMDG) [English only]

Proper shipping name : TOXIC SOLID, INORGANIC, N.O.S.

UN N° : 3288

**IMO-IMDG - Class or division** : 6.1 : Toxic substances.



## MATERIAL SAFETY DATA SHEET (MSDS)

## **NICKEL CHLORIDE AR (HEXAHYDRATE)**

## 14. Transport information (continued)

IMO-IMDG - Packing group : III

IMO- IMDG - Packing instructions: P002 LP02IMO-IMDG - Limited quantities: 5 kgIMO-IMDG - Marine pollution: YesEMS-Nr: F-A S-A

### 14.3. Air transport (ICAO-IATA) [English only]

Proper shipping name : TOXIC SOLID, INORGANIC, N.O.S.

UN N° : 3288

IATA - Class or division : 6.1 : Toxic substances.

IATA - Packing group : III

IATA - Passenger and Cargo Aircraft : ALLOWED

- Passenger and Cargo - Packing : 670

instruction

- Passenger and Cargo - Maximum : 100 kg

Quantity/Packing

- Cargo only - Packing instruction : 677
- Cargo only - Maximum Quantity/ : 200 kg

**Packing** 

IATA - Limited Quantites : 10 kg ERG-Nr : 6L

## 15. Regulatory information

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

**Safety, health and environmental**: Ensure all national/local regulations are observed.

regulations/legislation specific for the

substance or mixture

REACH Restrictions - Annex XVII : The components of this product are not subject to restrictions.

REACH Authorisation - Annex XIV : The components of this product are not subject to authorization.

15.2. Chemical Safety Assessment

Chemical Safety Assessment : It has not been carried out.

## 16. Other information

Revision - See : \*

Page: 10



# MATERIAL SAFETY DATA SHEET (MSDS)

## **NICKEL CHLORIDE AR (HEXAHYDRATE)**

In accordance with REACH Regulation (CE) No 1907/2006 and with CLP Regulation (CE) No 1272/2008

## **DISCLAIMER:**

- SUVCHEM Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- SUVCHEM shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

**End of document**