

# OTTO CHEMIE PVT LTD

An ISO 9001 : 2015 & GMP Certified Company  
101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate,  
Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel : + 91 98200 41841  
Email : [info@ottokemi.com](mailto:info@ottokemi.com) Web : [www.ottokemi.com](http://www.ottokemi.com)

## MATERIAL SAFETY DATA SHEET (MSDS)

### SECTION 1. Product identifiers

Product name: Nickel nitrate, hexahydrate, 98%  
Product Code: N 1505  
CAS No : 13478-00-7

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  
OTTO CHEMIE PVT LTD  
101, Aarkay Ruby Industrial Estate(1B), Opp Shree Narayan Industrial Estate,  
Chinchpada, Vasai East, Waliv, Maharashtra 401208.  
Email [info@ottokemi.com](mailto:info@ottokemi.com)

1.4. Emergency telephone number

Phone no. : + 91 22 2207 0099 (9:00am - 6:00 pm).

### SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Oxidizing solids, (Category 2)

Acute toxicity, (Category 4)

Acute toxicity, (Category 4)

Skin irritation, (Category 2)

Serious eye damage, (Category

1)

Respiratory sensitization,

(Category 1)

Skin sensitization, (Category 1)

Germ cell mutagenicity,

(Category 2)

Carcinogenicity, (Category 1A)

Reproductive toxicity, (Category

1B)

Specific target organ toxicity -

repeated exposure, (Category 1)

Short-term (acute) aquatic

hazard, (Category 1)

Long-term (chronic) aquatic

hazard, (Category 1)

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Hazard Statements

H272

H302 + H332

H315

H317

H318

H334

H341

H350

H360

H372

H272: May intensify fire; oxidizer.

H302: Harmful if swallowed.

H332: Harmful if inhaled.

H315: Causes skin irritation.

H318: Causes serious eye damage.

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

H317: May cause an allergic skin reaction.

H341: Suspected of causing genetic defects.

H350: May cause cancer.

H360: May damage fertility or the unborn child.

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

H400: Very toxic to aquatic life.

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

Danger

May intensify fire; oxidizer.

Harmful if swallowed or if inhaled.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye damage.

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

Suspected of causing genetic defects.

May cause cancer.

May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated

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H410  
Precautionary Statements  
P210

P273  
P280

P301 + P312

P305 + P351 + P338

P308 + P313  
Supplemental Hazard  
Statements  
Restricted to professional users.  
Reduced Labeling (<= 125 ml)  
Pictogram  
Signal Word  
Hazard Statements  
H334

H317  
H341  
H350  
H360  
H372

H318  
Precautionary Statements  
P280

P305 + P351 + P338

P308 + P313  
Supplemental Hazard  
Statements  
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.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Formula :  $N_2NiO_6 \cdot 6H_2O$   
Molecular weight : 290,79 g/mol  
CAS-No. : 13478-00-7  
EC-No. : 236-068-5

| Component                    | Classification | Concentration |
|------------------------------|----------------|---------------|
| Nickel dinitrate hexahydrate |                |               |

exposure if inhaled.

Very toxic to aquatic life with long lasting effects.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Avoid release to the environment.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/ attention.  
none

Danger

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

May cause an allergic skin reaction.

Suspected of causing genetic defects.

May cause cancer.

May damage fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure if inhaled.

Causes serious eye damage.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/ attention.  
none

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|  |   |          |
|--|---|----------|
| CAS-No. 13478-00-7<br>EC-No. 236-068-5 | Ox. Sol. 2; Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; Resp. Sens. 1; Skin Sens. 1; Muta. 2; Carc. 1A; Repr. 1B; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H272, H302, H332, H315, H318, H334, H317, H341, H350, H360, H372, H400, H410 Concentration limits: >= 1 %: STOT RE 1, H372; 0,1 - < 1 %: STOT RE 2, H373; >= 20 %: Skin Irrit. 2, H315; >= 0,01 %: Skin Sens. 1, H317; M-Factor - Aquatic Acute: 10 - Aquatic Chronic: 10 | <= 100 % |
|--|---|----------|

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

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, if necessary also oxygen.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). 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 extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

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

#### Nickel/nickel oxides

Not combustible.

Has a fire-promoting effect due to release of oxygen.

Ambient fire may liberate hazardous vapours.

### 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

### 5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Keep locked up or in an area accessible only to qualified or authorized persons. Do not store near combustible materials.

Hygroscopic.

Storage class

Storage class (TRGS 510): 5.1B: Oxidizing hazardous materials

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

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

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

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatrill® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

Splash contact

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Material: Nitrile rubber  
Minimum layer thickness: 0,11 mm  
Break through time: 480 min  
Material tested: KCL 741 Dermatrill® L

Body Protection  
protective clothing

Respiratory protection  
required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P3

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

a) Physical state

crystalline

b) Color

dark green

c) Odor

No data available

d) Melting

Melting point/ range: 56 °C - lit.

point/freezing point

e) Initial boiling point

No data available

and boiling range

f) Flammability (solid,

No data available

gas)

g) Upper/lower

No data available

flammability or

explosive limits

h) Flash point

Not applicable

i) Autoignition

No data available

temperature

j) Decomposition

No data available

temperature

k) pH

No data available

l) Viscosity

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

940 g/l at 20 °C - completely soluble, (Lit.)

No data available

m) Water solubility

n) Partition coefficient:

n-octanol/water

o) Vapor pressure

No data available

p) Density

2,05 g/mL at 25 °C - lit.

Relative density

No data available

q) Relative vapor

No data available

density

r) Particle

No data available

characteristics

s) Explosive properties

No data available

t) Oxidizing properties

The substance or mixture is classified as oxidizing with the category 2.

### 9.2 Other safety information

No data available

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### 10.3 Possibility of hazardous reactions

Violent reactions possible with:

Reducing agents

combustible substances

acids

### 10.4 Conditions to avoid

no information available

### 10.5 Incompatible materials

No data available

### 10.6 Hazardous decomposition products

In the event of fire: see section 5

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity

to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

## 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 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

No data available

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## SECTION 14: Transport information

|  |                            |            |
|--|----------------------------|------------|
| 14.1 UN number   |                            |            |
| ADR/RID: 2725  | IMDG: 2725                 | IATA: 2725 |
| 14.2 UN proper shipping name                                 |                            |            |
| ADR/RID : NICKEL NITRATE                                     |                            |            |
| IMDG : NICKEL NITRATE  |                            |            |
| IATA : Nickel nitrate  |                            |            |
| 14.3 Transport hazard class(es)                              |                            |            |
| ADR/RID: 5.1   | IMDG: 5.1                  | IATA: 5.1  |
| 14.4 Packaging group   |                            |            |
| ADR/RID: III   | IMDG: III                  | IATA: III  |
| 14.5 Environmental hazards                                   |                            |            |
| ADR/RID: yes   | IMDG Marine pollutant: yes | IATA: no   |
| 14.6 Special precautions for user                            |                            |            |
| Tunnel restriction code : (E)                                |                            |            |
| Further information : No data available                      |                            |            |
| 14.7 Maritime transport in bulk according to IMO instruments |                            |            |
| Not applicable for product as supplied.                      |                            |            |

## SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Authorisations and/or restrictions on use  
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)

: Nickel dinitrate hexahydrate

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: Nickel dinitrate hexahydrate

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council  
P8 OXIDISING LIQUIDS AND SOLIDS

on the control of major-accident hazards involving dangerous substances.

E1 ENVIRONMENTAL HAZARDS

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

## SECTION 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all

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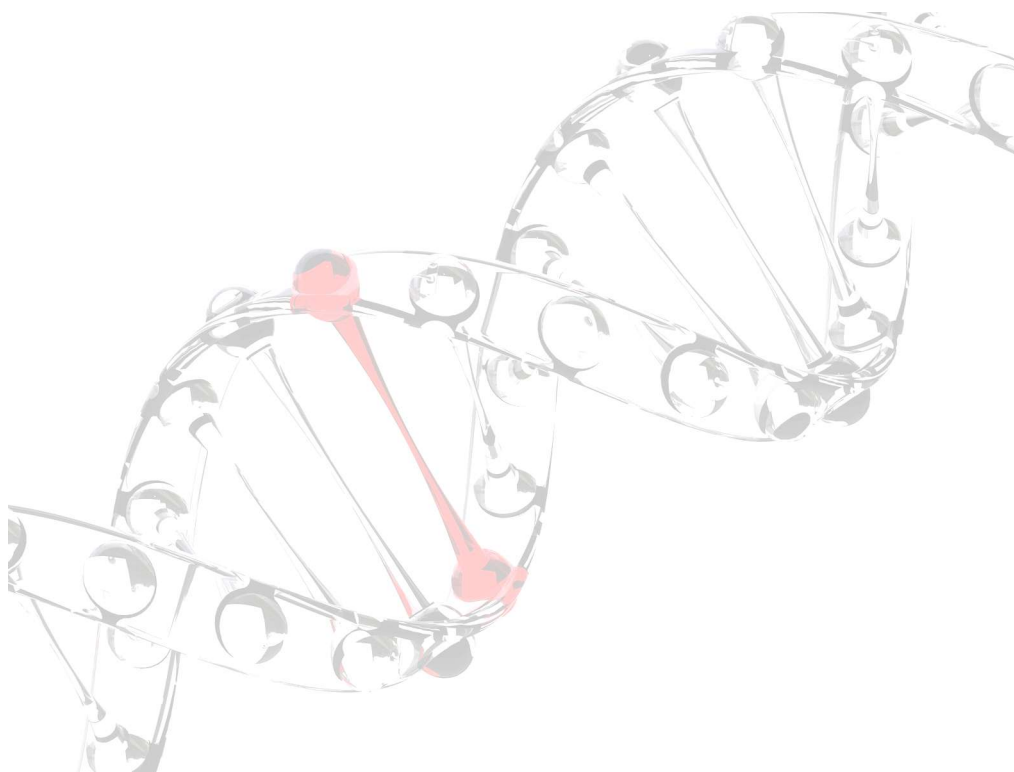
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precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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