

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/ UNDERTAKING

### 1.1 Identification of the article

#### 1.1.1 Commercial Product Name

ELECTROLYTIC NICKEL

#### 1.1.2 Product code

N1000, N1001, N1101, N1111, N1199, N1102, N1103, N1104, N1105, N1106, N1108, N1110, N1112, N1113, N1114, N1122, N1123, N1124, N1125, N1128, N1129, N1140, N1141, N1142, N1143, N1144, N1145, N1146, N1147, N1148, N1149, N1150, N1151, N1152, N1153, N1154, N1155, N1190, NFC01, NFC10, N1200, N1201, N1202, N1203, N1204, N1205, N1206, N1207, N1210, N1220, N1221, N1223, N1225, N1230, N1240, N1231, N1430, N1433, N1440, N1441, N1449, N1460, N1445, N1461, NFC14

### 1.2 Use of the Substance/Preparation

#### 1.2.1 Expressed in writing

Plating agent; Chemical raw material; Alloying agent;

### 1.3 Identification of the substance/preparation and the company/undertaking

#### 1.3.1 Supplier

Norilsk Nickel Harjavalta Oy

#### 1.3.2 Contact information

##### Street address

Teollisuuskatu 1

##### Postcode and post office

FIN 29200 Harjavalta

##### Telephone

+358 (0)2 53711

##### Telefax

+358 (0)2 5371 2250

##### Email

product.safety@nornik.fi

### 1.4 Emergency telephone number

#### 1.4.1 Telephone number, name and address

Norilsk Nickel Harjavalta Oy +358 (0)2 537 11

Finnish Poison Center +358 (0)9 4711

## 2. HAZARDS IDENTIFICATION

Carc. Cat. 3

Limited evidence of a carcinogenic effect.

May cause sensitization by skin contact.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Hazardous components

7440-02-0

231-111-4

Nickel

99,9

Carc. Cat. 3; R40; R43

## 4. FIRST AID MEASURES

### 4.1 Additional advice

If symptoms persist, call a physician.

### 4.2 Inhalation

Remove affected person from the immediate area. Ensure supply of fresh air. If breathing is irregular or stopped, administer artificial respiration. Consult a physician.

### 4.3 Skin contact

Wash off with soap and plenty of water. Remove soiled or soaked clothing immediately. Wash contaminated clothing before re-use.

### 4.4 Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

**4.5 Ingestion**

Rinse mouth. Consult a physician.

## 5. FIRE-FIGHTING MEASURES

**5.1 Suitable extinguishing media**

The product itself does not burn. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment e.g.: Dry powder; Carbon dioxide (CO<sub>2</sub>); Water spray jet; Foam;

## 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions**

Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

**6.2 Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

**6.3 Methods for cleaning up**

Pick up mechanically. Send in suitable containers for recovery or disposal. (Section 13)

## 7. HANDLING AND STORAGE

**7.1 Handling**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Safe handling advice

Avoid contact with skin, eyes and clothing. If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn.

Technical measures/Precautions

Provide good ventilation of working area (local exhaust ventilation if necessary).

**7.2 Storage**

Always keep in containers of same material as the original one. Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**8.1 Exposure Limit Values**

**8.1.1 National occupational exposure limits**

Metallic nickel

Maximum Exposure Limit: 0,5 mg/m<sup>3</sup>

UK Workplace Exposure Limits

**8.2 Exposure controls**

**8.2.1 Occupational exposure controls**

Avoid contact with skin and eyes. Do not breathe dust. Avoid repeated exposure. Wear suitable protective equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Remove soiled or soaked clothing immediately. Clean skin thoroughly after work. At work do not eat, drink, smoke or take drugs. Keep away from food, drink and animal feedingstuffs. Keep working clothes separately.

**8.2.1.1 Respiratory protection**

Use a respirator with filter model P3 (DIN 3181).

**8.2.1.2 Hand protection**

Protective gloves: Leather;

- 8.2.1.3 Eye protection**  
Face-shield;
- 8.2.1.4 Skin and body protection**  
Clothing as usual in the chemical industry.
- 8.2.2 Environmental exposure controls**  
The employer shall fulfill requirements of IPPC Directive.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 General Information (appearance, odour)**  
Appearance: Solid  
Colour: Silver  
Odour: Odourless
- 9.2 Important Health Safety and Environmental Information**
- 9.2.1 pH** No data available.
- 9.2.2 Boiling point/range** 2837 °C
- 9.2.3 Flash point** No data available.
- 9.2.4 Flammability (solid, gas)** No data available.
- 9.2.5 Explosive properties**
- 9.2.5.1 Lower explosion limit** No data available.
- 9.2.5.2 Upper explosion limit** No data available.
- 9.2.6 Oxidising properties** No data available.
- 9.2.7 Vapour pressure** No data available.
- 9.2.8 Relative density** 8,9 g/cm<sup>3</sup>
- 9.2.9 Solubility**
- 9.2.9.1 Water solubility** Insoluble
- 9.2.9.2 Fat solubility (solvent - oil to be specified)** No data available.
- 9.2.10 Partition coefficient (n-octanol/water)** No data available.
- 9.2.11 Viscosity** No data available.
- 9.2.12 Vapour density** No data available.
- 9.2.13 Evaporation rate** No data available.
- 9.3 Other data**  
Melting point/range: 1455 °C

## 10. STABILITY AND REACTIVITY

- 10.2 Materials to avoid**  
Oxidizing agents; Reacts with acids to form flammable/explosive hydrogen gases.
- 10.3 Hazardous decomposition products**  
Metallic oxides;

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Acute toxicity**  
LD50/oral/rat = 5g/kg
- 11.2 Primary irritation**  
No data available.
- 11.3 Sensitisation**  
May cause sensitisation by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

**11.4 Subacute, subchronic and prolonged toxicity**

Carc. Cat. 3

**11.5 Human experience**

No data available.

**11.6 Other information of acute toxicity**

No data available.

## 12. ECOLOGICAL INFORMATION

**12.1 Ecotoxicity**

**12.1.1 Aquatic toxicity**

EC50/48h/Salmo gairdneri: 17,1 mg/l

LC50/21d/Daphnia magna: 0,13 mg/l

EC50/96h/Selenastrum capricornutum: 0,012 mg/l

**12.1.2 Toxicity to other organisms**

No data available.

**12.2 Mobility**

No data available.

**12.3 Persistence and degradability**

**12.3.1 Biodegradation**

No data available.

**12.3.2 Chemical degradation**

No data available.

**12.4 Bioaccumulative potential**

No data available.

## 13. DISPOSAL CONSIDERATIONS

Council Directive 91/689/EEC on hazardous waste.

EWC Waste code 060499 - wastes not otherwise specified

The listed waste code numbers, according to the European Waste Catalogue (EWC), are to be understood as a recommendation (2000/532/EC).

**13.1 Contaminated packaging**

Contaminated packaging should be emptied as far as possible. Packaging that cannot be cleaned should be disposed as special waste in compliance with local and national regulations.

**13.2 Waste from residues / unused products**

Contact manufacturer. Dispose of as special waste in compliance with local and national regulations.

## 14. TRANSPORT INFORMATION

**Further information**

The product does not constitute a hazardous substance in national / international road, rail, sea and air transport.

## 15. REGULATORY INFORMATION

Labelling according to Directive 67/548/EEC and 1999/45/EC:

Limited labelling information is permitted according to Article 12 of EC-Directive1999/45/EC.

**15.1 Information on the warning label**

**15.1 EC Label**

**15.1.1 Letter code of the warning symbol and indications of danger for the preparation**

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**15.1.2 Names of the ingredients given on the warning label:**

-

**15.1.3 R phrase(s)**

-

**15.1.4 S phrase(s)**

-

**15.1.5 Special regulations on certain preparations**

Council Directive 94/27/EC

**15.2 National regulatory information:**

Nickel and nickel compounds are subject to the UK Chemical Hazards Information and Packaging (CHIP 3).

## 16. OTHER INFORMATION

**16.1 Full text of R-phrases referred to under sections 2 and 3**

R40 Limited evidence of a carcinogenic effect.

R43 May cause sensitization by skin contact.

**16.4 Additional information available from:**

Disclaimer

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this information or the product, the safety of this product, or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

**16.5 Literary reference**

Finnish Environment Institute: Environmental Properties of Chemicals

Lewis, R. J. : Sax's Dangerous Properties of Industrial Materials