



Material Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH), Article 31

Printing date 15.10.2014

Version number 28

Revision: 23.09.2014

Trade name: Basic Nickel Carbonate Powder

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

- **Product identifier**
- **Trade name: Basic Nickel Carbonate Powder**
- **Article number:** 303401
- **CAS Number:**
12607-70-4
- **EC number:**
235-715-9
- **Index number:**
028-010-00-0
- **Registration number** 01-2119490826-25-0002
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Electroplating auxiliary
- **Details of the supplier of the safety data sheet** · **Manufacturer/Supplier:** Keramikos
Oudeweg 153
2031 CC Haarlem
Tel.: 023 – 542 44 16
- **Informing department:**
Mo–Fr 8.30–17 h PRODUKTSERVICE
Tel.: 023 – 542 44 16
e-mail: info@keramikos.nl
- **Emergency telephone number:** 023- 542 44 16



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2 Hazards identification

- Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Resp. Sens. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Muta. 2	H341	Suspected of causing genetic defects.
Carc. 1A	H350i	May cause cancer by inhalation.
Repr. 1B	H360D	May damage the unborn child.
STOT RE 1	H372	Causes damage to organs through prolonged or repeated exposure.



GHS09 environment

Aquatic Acute 1	H400	Very toxic to aquatic life.
Aquatic Chronic 1	H410	Very toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4	H302	Harmful if swallowed.
Acute Tox. 4	H332	Harmful if inhaled.

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Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

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



T; Toxic

Repr. Cat. 2

R49-61-48/23: May cause cancer by inhalation. May cause harm to the unborn child. Toxic: danger of serious damage to health by prolonged exposure through inhalation.



Xn; Harmful

R20/22-68: Harmful by inhalation and if swallowed. Possible risk of irreversible effects.



Xn; Sensitising

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



Xi; Irritant

R38: Irritating to skin.



N; Dangerous for the environment

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

Carc. Cat. 1, Muta. Cat. 3

• **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

• **Classification system:**

The classification was made according to the EC-lists, latest edition, company and literature data have also been used.

• **Label elements**

• **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

• **Hazard pictograms**



GHS07



GHS08



GHS09

• **Signal word** Danger

• **Hazard-determining components of labelling:**

[carbonato(2-)]tetrahydroxytrinickel

• **Hazard statements**

H302 Harmful if swallowed.

H332 Harmful 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.

H341 Suspected of causing genetic defects.

H350i May cause cancer by inhalation.

H360D May damage the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

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3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Designation:**
12607-70-4 [carbonato(2-)]tetrahydroxytrinickel
- **Identification number(s):**
- **EC number:** 235-715-9
- **Index number:** 028-010-00-0
- **Additional information** For the wording of the listed risk phrases refer to section 16.

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H410 Very toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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4 First aid measures

- **Description of first aid measures**

- **General information**

Personal protection for the First Aider.
Remove contaminated clothing.

- **After inhalation**

Supply fresh air.
Do not use mouth to mouth or mouth to nose resuscitation.
Use a respiration bag or breathing device.
Call a doctor immediately.

- **After skin contact**

Clean with water and soap. If possible, also wash with polyethylene glycol 400. Seek medical treatment.

- **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.

- **After swallowing**

Rinse out mouth and then drink plenty of water.
Induce vomiting, if person is conscious. Seek medical help.
Instantly call for doctor.

- **Information for doctor**

- **Most important symptoms and effects, both acute and delayed**

No further relevant information available.

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

No further relevant information available.

GB

(Contd. on page 4)

(Contd. of page 3)

5 Firefighting measures

- **Extinguishing media**

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.

- **Special hazards arising from the substance or mixture** No further relevant information available.

- **Advice for firefighters**

- **Protective equipment:** Put on breathing apparatus.

- **Additional information** Collect contaminated fire fighting water separately. It must not enter drains.



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6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation Avoid causing dust.
Wear protective clothing.
- **Environmental precautions:** Do not allow product to reach sewage system or water bodies.
- **Methods and material for containment and cleaning up:**
Collect mechanically.
Dispose of contaminated material as waste according to item 13.
- **Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

7 Handling and storage

- **Handling**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
- **Information about protection against explosions and fires:** Keep breathing equipment ready.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed containers.
- **Specific end use(s)** No further relevant information available.



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8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
 - Take off immediately all contaminated clothing
 - Wash hands during breaks and at the end of the work.

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(Contd. of page 4)

Store protective clothing separately.

Avoid contact with the eyes and skin.

- **Breathing equipment:** Use breathing protection in case of insufficient ventilation.

- **Protection of hands:**

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

Butyl rubber, BR

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. · **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Tightly sealed safety glasses.
- **Body protection:** Protective work clothing.



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9 Physical and chemical properties

Information on basic physical and chemical properties · General Information · Appearance:

Form:	Crystalline
Colour:	Light green
Odour:	Odourless
Odour threshold:	Not determined.

pH-value:	Not applicable.
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Change in condition

Melting point/Melting range:	> 300 °C
Boiling point/Boiling range:	Not determined

Flash point:	Not applicable
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Inflammability (solid, gaseous)	Not determined.
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Ignition temperature:

Decomposition temperature:	240 °C
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Self-inflammability:	Product is not selfigniting.
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Danger of explosion:	Product is not explosive.
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Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure:	Not applicable.
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Specific gravity:

Bulk density at 20 °C:	ca. 0.47 kg/l
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Evaporation rate	Not applicable.
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Solubility in / Miscibility with Water:	Slightly soluble
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Partition coefficient (n-octanol/water):	Not determined.
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Viscosity: dynamic:	Not applicable.
kinematic:	Not applicable.

Other information	No further relevant information available.
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10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications. ·
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

12607-70-4 [carbonato(2-)]tetrahydroxytrinickel

Oral	LD50	840 mg/kg (Ratte)
Inhalative	LC50/4 h	1.167 mg/l (Ratte) (OECD Guideline 403 (Acute Inhalation Toxicity))

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritant effect.
- **Sensitization:**
Sensitization possible by inhalation.
Sensitization possible by skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version: Harmful
Irritant
Carcinogenic if inhaled.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
Muta. 2, Carc. 1A, Repr. 1B



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12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.

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- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available. ·
- Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
Harmful to aquatic organisms
- **Results of PBT and vPvB assessment ·**
- PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** Must be specially treated under adherence to official regulations.
- **Uncleaned packagings:**
- **Recommendation:**
Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.



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14 Transport information

<ul style="list-style-type: none"> · UN-Number · ADR, IMDG, IATA 	<p>UN3077</p>
<ul style="list-style-type: none"> · UN proper shipping name · ADR · IMDG · IATA 	<p>3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (nickel(II) carbonate basic hydrate)</p> <p>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (nickel(II) carbonate basic hydrate), MARINE POLLUTANT</p> <p>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (nickel(II) carbonate basic hydrate)</p>
<ul style="list-style-type: none"> · Transport hazard class(es) · ADR 	<p>9 (M7) Miscellaneous dangerous substances and articles.</p>
<div style="display: flex; align-items: center; gap: 10px;"> </div> <ul style="list-style-type: none"> · Class 	<p>9 (M7) Miscellaneous dangerous substances and articles.</p>

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· Label	9
· IMDG, IATA	
 	
· Class	9 Miscellaneous dangerous substances and articles.
· Label	9
· Packing group	
· ADR, IMDG, IATA	III
· Environmental hazards:	Product contains environmentally hazardous substances: nickel(II) carbonate basic hydrate
· Marine pollutant:	Yes Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· Kemler Number:	90
· EMS Number:	F-A,S-F
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5 kg
· Transport category	3
· Tunnel restriction code	E
· UN "Model Regulation":	UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (nickel(II) carbonate basic hydrate), 9, III



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15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS07 GHS08 GHS09

- **Signal word** Danger
- **Hazard-determining components of labelling:** [carbonato(2-)]tetrahydroxytrinickel

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• Hazard statements

- H302 Harmful if swallowed.
- H332 Harmful 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.
- H341 Suspected of causing genetic defects.
- H350i May cause cancer by inhalation.
- H360D May damage 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

- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P273 Avoid release to the environment.
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P391 Collect spillage.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

• National regulations

• Water hazard class:

Water danger class 3 (German Regulation) (Self-classification): extremely hazardous for water.

- **Chemical safety assessment:** A Chemical Safety Assessment has been carried out.



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16 Other information

The information contained herein is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS:

European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Muta. 2: Germ cell mutagenicity, Hazard Category 2

Carc. 1A: Carcinogenicity, Hazard Category 1Ai

Repr. 1B: Reproductive toxicity, Hazard Category 1B

STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

· *** Data compared to the previous version altered.**

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