

JINGMEN GEM CO.,LTD
NO.3,YINGCHUN ROAD,HIGH & NEW TECHNOLOGY DEVELOPMENT ZONE,JINGMEN

SGS Job No. : CQ19361985EC
Sample Name : Nickel hydroxycarbonate
End Uses : For special nickel plating, also used in the production of nickel salt
Composition/Ingredient of sample (as per client submission) : See *section 3 Composition/information on ingredients* on the SDS report
Job Receiving Date : 12 Sep 2018
SDS Preparation Period : 12 Sep 2018 – 18 Sep 2018

Service Requested : Safety Data Sheet (SDS) for the sample with submitted composition.

Summary : As per request, the contents and formats of the SDS are prepared in accordance with US Regulations Relating to Labor 29 CFR 1910.1200, and is provided per attached.

Remark:

The SDS is prepared based on the information provided by client.

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Zmguan

Zm guan
Approved Signatory



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Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

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Safety Data Sheet

29 CFR 1910.1200

Printing date 09/19/2018

Version number 1

Reviewed on 09/14/2018

1 Identification

- **Product identifier**
- **Trade name:** Nickel hydroxycarbonate
- **CAS Number:**
12607-70-4
- **EC number:**
235-715-9
- **Index number:**
028-010-00-0
- **Recommended use of the chemical and restrictions on use:**
- **Application of the substance / the preparation:**
For special nickel plating, also used in the production of nickel salt
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** JINGMEN GEM CO.,LTD
- **Full address:** NO.3,YINGCHUN ROAD,HIGH & NEW TECHNOLOGY DEVELOPMENT ZONE,JINGMEN
- **Phone number:**
+86-724-2499168
Fax: +86-724-2499158
- **Email:** Huangjialong@gem.com.cn
- **Other U.S. contact point:** Not available
- **Further information obtainable from:** JINGMEN GEM CO.,LTD
- **Emergency telephone number:**
Poison Center
Tel: +1 800 222 1222
+86-15271772605 Jialong Huang
- **Reference Number:** CQ19361985EC, CANEC1818904901

2 Hazard(s) identification

- **Classification of the substance or mixture**
Classification according to OSHA Hazard Communication Standard (29 CFR 1910.1200)



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 H350 May cause cancer.
 Repr. 1B H360 May damage fertility or the unborn child.
 STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
 Acute Tox. 4 H332 Harmful if inhaled.
 Skin Irrit. 2 H315 Causes skin irritation.
 Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Information concerning particular hazards for human and environment:**
The product has to be labeled due to the calculation procedure of OSHA Hazard Communication Standard (29 CFR 1910.1200).

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- **Classification system:**

The classification is according to the latest edition of OSHA Hazard Communication Standard (29 CFR 1910.1200), and extended by company and literature data.

- **Label elements**

- **Labelling according to OSHA Hazard Communication Standard (29 CFR 1910.1200)**

- **Hazard pictograms**



GHS07 GHS08

- **Signal word** *Danger*

- **Hazard-determining components of labeling:**

[carbonato(2-)] tetrahydroxytrinickel

- **Hazard statements**

H302+H332 Harmful if swallowed or 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.

H350 May cause cancer.

H360 May damage fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

- **Precautionary statements**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

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

P264 Wash thoroughly after handling.

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

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

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P284 [In case of inadequate ventilation] wear respiratory protection.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Rinse mouth.

P302+P352 If on skin: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P321 Specific treatment (see on this label).

P314 Get medical advice/attention if you feel unwell.

P362+P364 Take off contaminated clothing and wash it before reuse.

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

P342+P311 If experiencing respiratory symptoms: Call a poison center/doctor.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

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

- **Hazards not otherwise classified (HNOC)** No further relevant information available.

3 Composition/information on ingredients

- **Chemical characterization: Substances**

- **CAS No. Description**

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

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- **Identification number(s)**
- **EC number:** 235-715-9
- **Index number:** 028-010-00-0

4 First-aid measures

- **Description of first aid measures**
- **General description:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Immediately call a 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.

5 Fire-fighting measures

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture:**
During heating or in case of fire poisonous gases are produced.
- **Special protective equipment and precautions for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
Mount respiratory protective device.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.

7 Handling and storage

- **Precautions for safe handling:**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
For the general occupational hygienic measures refer to Section 8.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.

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· **Further information about storage conditions:** *Keep receptacle tightly sealed.*

8 Exposure controls/personal protection

· **Components with limit values that require monitoring at the workplace:****12607-70-4 [carbonato(2-)] tetrahydroxytrinickel (100%)**

PEL (USA)	Long-term value: 1 mg/m ³ as Ni
REL (USA)	Long-term value: 0.015 mg/m ³ as Ni; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.1 mg/m ³ as Ni; inhalable fraction

· **Regulatory information**

PEL (USA): Guide to Occupational Exposure Values (OSHA PELs)

REL (USA): Guide to Occupational Exposure Values (NIOSH RELs)

TLV (USA): Guide to Occupational Exposure Values (ACGIH)

· **Additional information:** *The lists that were valid during the creation were used as basis.*· **Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure.**· **Appropriate engineering controls:***Keep away from foodstuffs, beverages and feed.**Immediately remove all soiled and contaminated clothing.**Wash hands before breaks and at the end of work.**Store protective clothing separately.**Avoid contact with the skin.**Avoid contact with the eyes and skin.**See Section 7 for information about design of technical facilities.*· **Personal protective equipment:**· **Breathing equipment:***In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.*· **Protection of hands:**

Protective gloves

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.**Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.**Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*· **Material of gloves***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.*· **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.*

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· Eye protection:

Tightly sealed goggles

9 Physical and chemical properties

· General Information**· Appearance:**

Form:	Powder
Color:	Light green
· Odor:	Pungent smell
· Odor threshold:	Not available

· pH-value: Not available

· Change in condition

Melting point/Freezing point:	Not available
Initial boiling point and boiling range:	Not available

· Flash point: Not available

· Flammability (solid, gaseous): Not available

· Auto-Ignition temperature: Not available

· Decomposition temperature: Not available

· Explosion limits:

Lower:	Not available
Upper:	Not available

· Vapor pressure: Not available

· Density: Not available

· Relative density: Not available

· Vapor density: Not available

· Evaporation rate: Not available

· Solubility in / Miscibility with

Water: Not available

· Partition coefficient (n-octanol/water): Not available

· Viscosity:

Dynamic:	Not available
Kinematic:	Not available

· Other information No further relevant information available.

10 Stability and reactivity

· Reactivity: Data not available

· Chemical stability: Data not available

· Possibility of hazardous reactions: No dangerous reactions known.

· Conditions to avoid: No further relevant information available.

· Incompatible materials: No further relevant information available.

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· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:** Not available
- **Skin corrosion/irritation:** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation:** Irritating effect possible.
- **Respiratory or skin sensitization:**
Sensitization possible through inhalation.
Sensitization possible through skin contact.

· **Additional toxicological information:**· **Carcinogenic categories**· **IARC (International Agency for Research on Cancer)**

Substance is not listed.

· **NTP (National Toxicology Program)**

K

· **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|----------------------------------|--|
| · UN-Number | UN3077 |
| · DOT, IMDG, IATA | |
| · UN proper shipping name | Environmentally hazardous substances, solid, n.o.s. |
| · DOT | ([carbonato(2-)] tetrahydroxytrinickel) |
| · IMDG | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ([carbonato(2-)] tetrahydroxytrinickel), MARINE POLLUTANT |

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· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ([carbonato(2-)] tetrahydroxytrinickel)
· Transport hazard class(es) · DOT, IMDG, IATA	
	
· Class · Label	9 Miscellaneous dangerous substances and articles 9
· Packing group · DOT, IMDG, IATA	III
· Environmental hazards: · Marine pollutant:	Yes (DOT) Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· Special precautions for user · EMS Number: · Stowage Category · Stowage Code	Warning: Miscellaneous dangerous substances and articles F-A,S-F A SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT · Quantity limitations · Remarks: · IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	On passenger aircraft/rail: No limit On cargo aircraft only: No limit Special marking with the symbol (fish and tree). 5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· UN "Model Regulation":	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S. ([CARBONATO(2-)] TETRAHYDROXYTRINICKEL), 9, III

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Sara**· **Section 355 (extremely hazardous substances):**

Substance is not listed.

· **Section 313 (Specific toxic chemical listings):**

Substance is listed.

· **TSCA (Toxic Substances Control Act):**

Substance is listed.

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· Proposition 65**· Chemicals known to cause cancer:**

Substance is listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· New Jersey Right-to-Know List:

Substance is not listed.

· New Jersey Special Hazardous Substance List:

Substance is not listed.

· Pennsylvania Right-to-Know List:

Substance is not listed.

· Pennsylvania Special Hazardous Substance List:

Substance is not listed.

· Cancerogenicity categories**· EPA (Environmental Protection Agency)**

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· National regulations:**· Additional classification according to Decree on Hazardous Materials:**

Carcinogenic hazardous material group I (extremely dangerous).

Carcinogenic hazardous material group II (very dangerous).

Carcinogenic hazardous material group III (dangerous).

· Information about limitation of use:

Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

16 Other information

The contents and format of this SDS are in accordance with 29 CFR 1910.1200.

DISCLAIMER OF LIABILITY

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

· Date of preparation / last revision 09/19/2018 / -**· Abbreviations and acronyms:**

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

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*IMDG: International Maritime Code for Dangerous Goods**DOT: US Department of Transportation**IATA: International Air Transport Association**ACGIH: American Conference of Governmental Industrial Hygienists**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**NIOSH: National Institute for Occupational Safety**OSHA: Occupational Safety & Health**Acute Tox. 4: Acute toxicity – Category 4**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Resp. Sens. 1: Respiratory sensitisation – Category 1**Skin Sens. 1: Skin sensitisation – Category 1**Muta. 2: Germ cell mutagenicity – Category 2**Carc. 1A: Carcinogenicity – Category 1A**Repr. 1B: Reproductive toxicity – Category 1B**STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1*

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