SAFETY DATA SHEET
NICKEL HYDROXYCARBONATE POWDER

Date: Jan 9, 2008 Previous date: Oct 9, 2007 Version: 2

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Commercial Product Name
NICKEL HYDROXYCARBONATE POWDER

Product code
N50, N5001, N5011, N5101, N52, N53, N5401

Distributor:

Distributed by:
Laguna Clay Company
14400 Lomitas Ave
City of Industry, CA 91746
1-800-4Laguna
info@lagunaclay.com
www.lagunaclay.com

2. COMPOSITION, INFORMATION ON INGREDIENTS

Component	CAS-number	Percent	OSHA PEL	ACGIH TLV
Nickel carbonate hydroxide	12607-70-4	100	1 mg/m3	0.1 mg/m3

3. HAZARDS IDENTIFICATION

Routes of exposure
The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

Inhalation risk
Evaporation at 68 °F is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

Effects of short-term exposure
The substance is irritating to the eyes the skin and the respiratory tract.

Inhalation	Cough, sore throat
Skin	Redness
Eyes	Redness
Ingestion	Abdominal pain, dizziness, headache, nausea, vomiting

Effects of long-term or repeated exposure
Repeated or prolonged contact may cause skin sensitization. May cause an allergic contact dermatitis. Once established, skin sensitization to nickel is permanent. Repeated or prolonged inhalation exposure may cause asthma. Lungs may be affected by repeated or prolonged exposure to the aerosol. The substance may have effects on the nasal sinuses, resulting in inflammation and ulceration. This substance is carcinogenic to humans.

4. FIRST AID MEASURES

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.

Skin contact
Wash off with soap or mild detergent and plenty of water. Remove soiled or soaked clothing, shoes and jewellery immediately. Clean up contaminated clothing, shoes before re-use. If irritation persists, consult a specialist.

Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes or until irritation subsides, whichever is longer. If eye irritation persists, consult a specialist.

Ingestion
Rinse mouth, if person is completely conscious. Consult a physician.

Notes to physicians
Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Flash point	Not applicable.
Flammability (solid, gas)	Not applicable.
Explosive properties	High concentrations of dust may present a dust explosion hazard.
Lower explosion limit	Unknown
Upper explosion limit	Unknown

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 (CO2); Water spray jet;

Extinguishing media which must not be used for safety reasons
Strong water jet;

Specific hazards
In the event of fire the following can be released: Metal dust; Metallic oxides;

Special protective equipment for firefighters
Wear self-contained breathing apparatus and protective suit.

Specific methods
Collect contaminated fire extinguishing water separately. Do not discharge into the drains/surface waters/groundwater.

6. ACCIDENTAL RELEASE MEASURES

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

Environmental precautions and methods for cleaning up
The spill should be contained and the area should be cleaned by wet-sweeping or vacuum cleaning (HEPA-filter). Avoid dust formation. Send in suitable containers for recovery or disposal (See section 13). Do not discharge into the drains/surface waters/groundwater. The California Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop 65) prohibits contaminating any known source of drinking water with substances known to cause cancer and/or reproductive toxicity.

7. HANDLING AND STORAGE

Handling
Avoid contact with skin and eyes. Do not breathe dust. Avoid repeated exposure. Wear suitable protective equipment (See section 8). If workplace exposure limits are exceeded, respiratory protection approved for this particular job must be worn. Provide good ventilation of working area (local exhaust ventilation if necessary). 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 feeding stuffs. Keep working clothes separately.

Storage
Always keep in containers of same material as the original one. Keep containers tightly closed in a dry, cool and well-ventilated place to avoid dampness and away from incompatible products. Avoid formation and deposition of dust.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering control
Provide good ventilation of working area in order to maintain nickel concentration in the air below the occupational exposure limits (PEL, TLV). Use local exhaust ventilation if necessary. If workplace exposure limits are exceeded, use respiratory protection as specified below.

Respiratory protection
If workplace exposure limits are exceeded, use NIOSH approved respiratory protection.

Hand protection
Protective gloves: Rubber or other impervious coating.

Eye and face protection
Wear safety glasses or face shield in operations that do scatter fine particles in the air.

Skin and body protection
To prevent repeated or prolonged skin contact, wear impervious clothing and shoes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Powder
Colour	Green
Odour	Odourless
Boiling point/range	No data available.
Oxidising properties	No data available.
Vapour pressure	No data available.

Specific gravity	0.75-0.80 g/cm3
Water solubility	34.5 mg/l (pH 6); 7.1 mg/l (pH 8)
Partition coefficient (n-octanol/water)	No data available.
Viscosity	No data available.
Vapour density	No data available.
Evaporation rate	No data available.
Melting point	No data available.

10. STABILITY AND REACTIVITY

Stability
Stable.

Hazardous polymerization
Will not occur.

Conditions to avoid
Avoid dust formation.

Materials to avoid
Acids;

Hazardous decomposition products
Metallic oxides;

11. TOXICOLOGICAL INFORMATION

Toxicity
The International Agency for Research on Cancer (IARC) has classified nickel compounds to "Group 1 - Carcinogenic to humans". Nickel compounds are found in Volume 49 of monographs at http://www.iarc.fr/

The National Toxicology Program (NTP) has classified nickel compounds as "Known to Human Carcinogens". Report on Carcinogens (RoC) concerning nickel compounds is found at http://ntp.niehs.nih.gov/.

Acute toxicity
LD50/oral/rat = 1500 mg/kg

Routes of exposure
The substance can be absorbed into the body by inhalation, through the skin and by ingestion.

Effects of short-term exposure
The substance is irritating to the eyes the skin and the respiratory tract.

Effects of long-term or repeated exposure
Repeated or prolonged contact may cause skin sensitization. May cause an allergic contact dermatitis. Once established, skin sensitization to nickel is permanent. Repeated or prolonged inhalation exposure may cause asthma. Lungs may be affected by repeated or prolonged exposure to the aerosol. The substance may have effects on the nasal sinuses, resulting in inflammation and ulceration. This substance is carcinogenic to humans.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic toxicity No data available.

Persistency and degradability
Biodegradation No data available.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products
Dispose of as special waste in compliance with federal, state and local regulations.

Contaminated packaging
Contaminated packaging should be emptied as far as possible. Packaging that cannot be cleaned should be disposed in compliance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT shipping name	RQ, Environmentally Hazardous Substance, Solid, NOS (contains Nickel carbonate hydroxide)
DOT hazard class	9
UN-number	UN3077
DOT packing group	III
Air freight transportation	RQ, Environmentally Hazardous Substance, Solid, NOS (contains Nickel carbonate hydroxide), 9, UN3077, III
Ocean transportation	RQ, Environmentally Hazardous Substance, Solid, NOS (contains Nickel carbonate hydroxide), 9, UN3077, III
Reportable quantity	None

15. REGULATORY INFORMATION

TSCA Status
This product is listed on the US TSCA Inventory.

TSCA 12(b) Export notification
No components of this product are subject to TSCA 12(b) export notification requirements.

California Proposition 65, Chemicals Known to the State to Cause Cancer or Reproductive Toxicity
Nickel compounds are listed.

SARA 302 extremely hazardous substance list
This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substance List.

Clean Air Act Section 112, Hazardous Air Pollutants
Nickel compounds are listed.

SARA (311, 312) hazard class
Chronic health hazard.

EPCRA (SARA Title III) Section 313 toxic chemical
Nickel compounds are listed.

16. OTHER INFORMATION

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