

according to Regulation (EC) No. 1907/2006 Version 2 Revision Date 04.03.2019

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

1.1	Product identifiers Product name :	Nickel carbonate, basic hydrate		
	Product Number : Brand : REACH No. : CAS-No. :	5527 BETTER EQUIPPED A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline. 958638-02-3		
1.2	Relevant identified uses of the substance or mixture and uses advised against			
	Identified uses :	Laboratory chemicals, Manufacture of substances		
	Uses advised against :	Not for sale to the general public		
1.3	Details of the supplier of the Company :	e safety data sheet Better Equipped, Wrenbury Business Park, Wrenbury Road, Wrenbury, Nantwich, Cheshire, CW5 8EB, UK		
		Telephone +44 (0) 800 9707142 Fax +44 (0) 800 066 4443 E-mail address sales@betterequipped.co.uk		
1.4	Emergency telephone number			
	Emergency Phone #	+44 (0)1270 781238		

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Skin irritation (Category 2), H315 Respiratory sensitisation (Category 1), H334 Skin sensitisation (Category 1), H317 Germ cell mutagenicity (Category 2), H341 Carcinogenicity (Category 1B), H350 Reproductive toxicity (Category 1B), H360 Specific target organ toxicity - repeated exposure, Inhalation (Category 1), H372 Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.



2.2 Label elements

Labelling according	Regulation (EC) No 1272/2008
Pictogram	

	· · · ·
Signal word	Danger
Hazard statement(s)	
H302 + H332	Harmful if swallowed or if inhaled.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)	
P201	Obtain special instructions before use.
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P284	Wear respiratory protection.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
Supplemental Hazard Statements	none

Restricted to professional users.

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.

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula	:	$CH_4Ni_3O_7 \cdot xH_2O$
Molecular weight	:	304.12 g/mol
CAS-No.	:	958638-02-3

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
Nickel carbonate, basic hydrate			
CAS-No.	958638-02-3	Acute Tox. 4; Skin Irrit. 2; Resp. Sens. 1; Skin Sens. 1; Muta. 2; Carc. 1B; Repr. 1B; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H302, H332, H315, H334, H317, H341, H350, H360, H372, H400, H410 M-Factor - Aquatic Acute: 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

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician. Remove contaminated clothing.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. 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 water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media Non stated

- 5.2 Special hazards arising from the substance or mixture No data available
- **5.3** Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.
- 5.4 Further information No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- 6.1.1 For non-emergency personnel

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

- 6.1.2 For emergency responders

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.



SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.1.2 Advice on general occupational hygiene:

- No smoking.
- Do not eat or drink.
- Wash hands after use.
- Remove contaminated clothing.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

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

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Use Local exhaust ventilation (LEV).

Personal protective equipment

Eye/face protection

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

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- a) Appearance
- b) Odour
- c) Odour Threshold
- d) pH
- e) Melting point/freezing point
- f) Initial boiling point and boiling range
- g) Flash point
- h) Evaporation rate
- i) Flammability (solid, gas)
- j) Upper/lower flammability or explosive limits
- k) Vapour pressure
- Vapour density
- m) Relative density
- n) Water solubility
- o) Partition coefficient: n- octanol/water
- p) Auto-ignition temperature
- q) Decomposition temperature
- r) Viscosity
- s) Explosive properties
- t) Oxidizing properties

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

- 10.1 Reactivity No data available
- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** No data available
- **10.4 Conditions to avoid** No data available
- **10.5** Incompatible materials Strong acids

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nickel/nickel oxides Other decomposition products - No data available In the event of fire: see section 5

Form: powder Colour: light green No data available 0.1 g/l - slightly soluble No data available No data available



SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - female - 840 mg/kg (OECD Test Guideline 401)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation No data available

Germ cell mutagenicity In vitro tests showed mutagenic effects

Carcinogenicity

Possible human carcinogen

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Presumed human reproductive toxicant

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure

Inhalation - Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard

No data available

Additional Information RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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 Other adverse effects



Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. Unused product may be returned and reused, in addition to disposal.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information				
14.1	UN numbe ADR/RID: 3	e r 3077	IMDG: 3077	IATA: 3077
14.2	UN proper ADR/RID: IMDG: IATA:	 ber shipping name D: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ([Carbonato(2-)]tetrahydroxytrinickel hydrate) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ([Carbonato(2-)]tetrahydroxytrinickel hydrate) Environmentally hazardous substance, solid, n.o.s. ([Carbonato(2-)]tetrahydroxytrinickel hydrate) 		
14.3	Transport ADR/RID: 9	hazard class(es)	IMDG: 9	IATA: 9
14.4	Packaging ADR/RID: I	group 	IMDG: III	IATA: III
14.5	Environme ADR/RID: y	ental hazards /es	IMDG Marine pollutant: yes	IATA: yes
14.6	Special pro	ecautions for user		

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code $_{\mbox{N/A}}$

SECTION 15: Regulatory information

- **15.1** Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
- **15.2 Chemical safety assessment** For this product a chemical safety assessment was not carried out



SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H302 + H332	Harmful if swallowed or if inhaled.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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.

The following sections of this data sheet have been updated:

 $1.1,\,1.2,\,4.1,\,5.1,\,6.1,\,7.1,\,8.1,\,8.2,\,11,\,12,\,13,\,14.7,\,16$

We strongly recommend reading the entire data sheet for this chemical in preparation ahead of use.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.