

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 16/04/2015 Revision date: 11/03/2024 Supersedes version of: 07/02/2022 Version: 12.0

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

1.1. Product identifier

Product form: MixtureProduct name: Nickelised Carbon 30% Ni Granular 0.85 to 1.7mmProduct code: B1088Product group: End product	
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1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category	: Professional use
Use of the substance/mixture	: Laboratory chemicals
Function or use category	: Laboratory chemicals

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Elemental Microanalysis Ltd	
1 Hameldown Road	
Okehampton, Devon, EX20 1UB	
GB United Kingdom	
T +44 1837 54446	
enquiries@microanalysis.co.uk, https://www.elementalmicroanalysis.com/	
4.4. Emergeney telephone number	

1.4. Emergency telephone number

Emergency number

: +44 (0) 7990 767375

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Specific target organ toxicity – Repeated exposure, Category 1	H372
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure. May cause an allergic skin reaction.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/20	008 [CLP]
Hazard pictograms (CLP)	GHS07 GHS08
Signal word (CLP)	Danger
Contains	NICKEL
Hazard statements (CLP)	: H317 - May cause an allergic skin reaction.
	H351 - Suspected of causing cancer.
	H372 - Causes damage to organs through prolonged or repeated exposure.
Precautionary statements (CLP)	P201 - Obtain special instructions before use.
	P261 - Avoid breathing dust.

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P280 - Wear eye protection, protective clothing, protective gloves.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
CARBON substance with national workplace exposure limit(s) (AT, GB, PL)	CAS-No.: 7440-44-0 EC-No.: 215-609-9	70	Not classified
NICKEL substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GB, HR, HU, IE, LT, LV, PL, PT, SE, SI, IS); substance with a Community workplace exposure limit	CAS-No.: 7440-02-0 EC-No.: 231-111-4 EC Index-No.: 028-002-00-7	30	Carc. 2, H351 STOT RE 1, H372 Skin Sens. 1, H317

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and	effects, both acute and delayed
Symptoms/effects after skin contact	: May cause an allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures	\$				
5.1. Extinguishing media					
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Suitable extinguishing media

: Water spray. Dry powder. Foam.

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5.2. Special hazards arising from the substance or mixture		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. Advice for firefighters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental rel	lease measures
6.1. Personal precautions, prote	ctive equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for co	ontainment and cleaning up
Methods for cleaning up	: Mechanically recover the product. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13	3.

SECTION 7: Handling and s	storage
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.
Hygiene measures	: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, i	ncluding any incompatibilities
Storage conditions	: Store locked up. Store in a well-ventilated place. Keep cool.
7.3. Specific end use(s)	

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

CARBON (7440-44-0)	
United Kingdom - Occupational Exposure Limits	
Local name	Graphite

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CARBON (7440-44-0)	
WEL TWA (OEL TWA)	10 mg/m³ inhalable dust 4 mg/m³ respirable
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
NICKEL (7440-02-0)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Nickel metal
IOEL TWA	0.005 mg/m ³ (respirable fraction)
Remark	(Year of adoption 2011)
Regulatory reference	SCOEL Recommendations
EU - Biological Limit Value (BLV)	
Local name	Nickel and nickel compounds
Regulatory reference	SCOEL List of recommended health-based BLVs and BGVs
United Kingdom - Occupational Exposure Limits	
Local name	Nickel
WEL TWA (OEL TWA)	 0.1 mg/m³ and its inorganic compounds (except nickel tetracarbonyl): water-soluble nickel compounds (as Ni) 0.5 mg/m³ and its inorganic compounds (except nickel tetracarbonyl): nickel and water insoluble nickel compounds (as Ni)
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity), Carc (Capable of causing cancer and/or heritable genetic damage (nickel oxides and sulphides)), Sen (Capable of causing occupational asthma (nickel sulphate))
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

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8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Grey.
Odour	: odourless.
Odour threshold	: Not available
Melting point	: No data available.
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: Non flammable.
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: No data available.
Decomposition temperature	: Not available
рН	: No data available.
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: No data available.
Relative vapour density at 20°C	: No data available.
Particle size	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.
10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).
10.5. Incompatible materials
No additional information available
10.6. Hazardous decomposition products

SECTION 11: Toxicological information 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 : Not classified Acute toxicity (oral) Acute toxicity (dermal) Not classified : Acute toxicity (inhalation) Not classified CARBON (7440-44-0) LD50 oral rat > 10000 mg/kg Source: International Uniform ChemicaL Information Database LC50 Inhalation - Rat (Vapours) > 64.4 mg/l NICKEL (7440-02-0) LD50 oral rat > 9000 mg/kg Source: NITE Skin corrosion/irritation : Not classified pH: No data available. Serious eye damage/irritation : Not classified pH: No data available. Respiratory or skin sensitisation : May cause an allergic skin reaction. Germ cell mutagenicity : Not classified Carcinogenicity : Suspected of causing cancer. NICKEL (7440-02-0) IARC group 2B - Possibly carcinogenic to humans Reproductive toxicity Not classified : : Not classified STOT-single exposure STOT-repeated exposure Causes damage to organs through prolonged or repeated exposure. ÷ NICKEL (7440-02-0) STOT-repeated exposure Causes damage to organs through prolonged or repeated exposure. : Not classified Aspiration hazard Nickelised Carbon 30% Ni Granular 0.85 to 1.7mm Viscosity, kinematic Not applicable 11.2. Information on other hazards

No additional information available

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SECTION 12: Ecological informatic 12.1. Toxicity	n
Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified
Not rapidly degradable CARBON (7440-44-0)	
LC50 - Fish [1]	5600 mg/l
NICKEL (7440-02-0)	
LC50 - Fish [1]	1.1 mg/l Source: OECD
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
CARBON (7440-44-0)	
Partition coefficient n-octanol/water (Log Pow)	0.78 Source: Quantitative Structure Activity Relation
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessme	ent
No additional information available	
12.6. Endocrine disrupting properties	
No additional information available	
12.7. Other adverse effects	
No additional information available	

SECTION 13: Disposal considerations

13.1. Waste treatment methods	3
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
HP Code	 HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.
	HP7 - "Carcinogenic:" waste which induces cancer or increases its incidence
	HP13 - "Sensitising:" waste which contains one or more substances known to cause
	sensitising effects to the skin or the respiratory organs.

SECTION 14: Transport information In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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ADR	IMDG	ΙΑΤΑ	ADN	RID
4.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard o	class(es)	· · · · ·		<u>.</u>
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental haz	zards			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

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Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information Abbreviations and acronyms: ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways ADR European Agreement concerning the International Carriage of Dangerous Goods by Road ATE Acute Toxicity Estimate BCF **Bioconcentration factor** BLV **Biological limit value** BOD Biochemical oxygen demand (BOD) COD Chemical oxygen demand (COD) DMEL **Derived Minimal Effect level** DNEL Derived-No Effect Level EC-No. European Community number EC50 Median effective concentration EN European Standard IARC International Agency for Research on Cancer IATA International Air Transport Association IMDG International Maritime Dangerous Goods LC50 Median lethal concentration LD50 Median lethal dose LOAEL Lowest Observed Adverse Effect Level NOAEC No-Observed Adverse Effect Concentration NOAEL No-Observed Adverse Effect Level NOEC No-Observed Effect Concentration OECD Organisation for Economic Co-operation and Development OEL Occupational Exposure Limit PBT Persistent Bioaccumulative Toxic PNEC Predicted No-Effect Concentration RID Regulations concerning the International Carriage of Dangerous Goods by Rail SDS Safety Data Sheet STP Sewage treatment plant ThOD Theoretical oxygen demand (ThOD) TLM Median Tolerance Limit VOC Volatile Organic Compounds

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Abbreviations and acronyms:	
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Full text of H- and EUH-statements:	
Carc. 2	Carcinogenicity, Category 2
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1

The classification complies with

: ATP 12

Safety Data Sheet (SDS)_EMAL, EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.