

SAFETY DATA SHEET

Black Nickel Oxide

Reviewed
June 2017

Section 1 - Product and Company Information

Product detail

Product Name: Black Nickel Oxide

CAS: 1313-99-1

Manufacturer/Supplier

Arlimin Industries LLC

P.O. Box 271497

Fort Collins, CO 80526

Tel: 832-280-9980

www.arlimin.com

Section 2 - Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Carcinogenicity, Inhalation (Category 1A)

Skin sensitization (Category 1)

Chronic aquatic toxicity (Category 4)

Specific target organ toxicity - repeated exposure (Category 1)

Classification according to EU Directives 67/548/EEC or 1999/45/EC

May cause cancer by inhalation. Toxic: danger of serious damage to health by prolonged exposure through inhalation. May cause sensitization by skin contact. May cause long-term adverse effects in the aquatic environment.

Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]



Pictogram

Signal word Danger

Hazard statement(s)

H317 May cause an allergic skin reaction.

H350i May cause cancer by inhalation.

H372 Causes damage to organs through prolonged or repeated exposure.

H413 May cause long lasting harmful effects to aquatic life.

Precautionary statement(s)

P201 Obtain special instructions before use.

P280 Wear protective gloves.

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

Supplemental Hazard

Statements

none

Restricted to professional users.

According to European Directive 67/548/EEC as amended.



Hazard symbol(s)

R-phrases(s)

R49 May cause cancer by inhalation.

R48/23 Also toxic: danger of serious damage to health by prolonged exposure through inhalation.

R43 May cause sensitization by skin contact.

R53 May cause long-term adverse effects in the aquatic environment. S-phrase(s)

S53 Avoid exposure - obtain special instructions before use.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Restricted to professional users.

Other hazards – none

Section 3 - Composition/Information on Ingredients

Product Name: Black nickel oxide

CAS No.: 1313-99-1

EINECS/ELINCS: 215-215-7

Section 4 - First Aid Measures

General advice

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

If inhaled, 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.

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.

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed

no data available

Section 5 - Fire Fighting Measures

Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Nickel/nickel oxides

Advice for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

Further information

no data available

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

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

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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.

Reference to other sections

For disposal see section 13.

Section 7 - Handling and Storage

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. Normal measures for preventive fire protection.

Conditions for safe storage, including any incompatibilities

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

Specific end uses

no data available

Section 8 - Exposure Controls / Personal Protection

Control parameters

Components with workplace control parameters

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.

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).

Section 9 - Physical/Chemical Properties

Information on basic physical and chemical properties

a) Appearance Form: powder

Color: black

b) Odor no data available

c) Odor Threshold no data available

d) pH no data available

e) Melting point/freezing point

no data available

f) Initial boiling point and boiling range

no data available

g) Flash point not applicable

h) Evaporation rate no data available

i) Flammability (solid, gas) no data available

j) Upper/lower flammability or explosive limits

no data available

k) Vapour pressure no data available

l) Vapour density no data available

m) Relative density 6,67 g/mL at 25 °C

n) Water solubility no data available

o) Partition coefficient: noctanol/water

no data available

p) Autoignition temperature

no data available

q) Decomposition temperature

no data available

r) Viscosity

no data available

s) Explosive properties

no data available

t) Oxidizing properties

no data available

Other safety information

no data available

Section 10 - Stability and Reactivity

Reactivity

no data available

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Chemical stability

no data available

Possibility of hazardous reactions

no data available

Conditions to avoid

no data available

Incompatible materials

Strong acids

Hazardous decomposition products

Other decomposition products - no data available

Section 11 - Toxicological Information

Information on toxicological effects

Acute toxicity

LD50 Subcutaneous - mouse - 50 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

Maximisation Test - rabbit - OECD Test Guideline 406 - May cause sensitization by skin contact.

Germ cell mutagenicity

no data available

Carcinogenicity

This is or contains a component that has been reported to be carcinogenic based on its

IARC, OSHA, ACGIH, NTP, or EPA classification.

Human carcinogen.

IARC: 1 - Group 1: Carcinogenic to humans (Nickel monoxide)

Reproductive toxicity

no data available

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

Potential health effects

Inhalation Toxic if inhaled. May cause respiratory tract irritation.

Ingestion Toxic if swallowed.

Skin Toxic if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Additional Information

RTECS: QR8400000

Section 12 - Ecological Information

Toxicity

no data available

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Persistence and degradability

Biodegradability Result: - According to the results of tests of biodegradability this product is not readily biodegradable.

Bioaccumulative potential

Bioaccumulation Fucus vesiculosus - 21 d -0,00001 mg/l

Bioconcentration factor (BCF): 675

Method: Tested according to Annex V of Directive 67/548/EEC.

Remarks: The product may be accumulated in organisms.

Mobility in soil

no data available

Results of PBT and vPvB assessment

no data available

Other adverse effects

Section 13 - Disposal Considerations

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contaminated packaging, dispose of as unused product.

Section 14 - Transport Information

UN number
ADR/RID: - IMDG: - IATA: -
UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods
Transport hazard class(es)
ADR/RID: - IMDG: - IATA: -
Packaging group
ADR/RID: - IMDG: - IATA: -
Environmental hazards
ADR/RID: no IMDG Marine pollutant: no IATA: no
Special precautions for user
no data available

Section 15 - Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

Chemical Safety Assessment

no data available

Section 16 - Other Information

Warranty

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall **Arlimin Industries LLC** be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if **Arlimin Industries LLC** has been advised of the possibility of such damages.