

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Zinc scrap, nickel alloy

Product no.

-

REACH registration number

01-2119488047-31 (UVCB)

Other means of identification

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture

Residues from refining and smelting of zinc.

Uses advised against

-

1.3. Details of the supplier of the safety data sheet

Company and addressBoliden Odda AS
Eitrheim
5750 Odda
Norway

Tel +47 53 64 91 00

Fax +47 53 64 33 77

Contact person**E-mail**

post.odda@boliden.com

SDS date

01-06-2015

SDS Version

1.0

1.4. Emergency telephone number

999 (or 111 for non-emergency medical advice). Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department or the NHS enquiry service). See section 16.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

This product is not classified as dangerous.

2.2. Label elements

Hazard pictogram(s)

-

Signal word

-

Hazard statement(s)

-

Safety

General

-

According to EC-Regulation 1907/2006 (REACH)

statement(s) Prevention -
Response -
Storage -
Disposal -

Identity of the substances primarily responsible for the major health hazards

Zinc scrap, nickel alloy is an UVCB substance, including Metallic zinc, Zinc oxide, Nickel.

2.3. Other hazards

The product itself is not classified, but when handling in molten form it may give raise to damages, eg burns.

Additional labelling

-

Additional warnings

-

VOC

-

SECTION 3: Composition/information on ingredients

3.1. Substances

NAME:	Residues, zinc smelting
IDENTIFICATION NOS.:	CAS-no: 69029-83-0 EC-no: 273-824-3 REACH-no: 01-2119488047-31
CONTENT:	100%
CLP CLASSIFICATION:	NA

(*) See full text of H-phrases in chapter 16. Occupational exposure limits are listed in section 8, if these are available.

3.2. Mixtures

-

Other informations

Zinc scrap, nickel alloy is an UVCB substance, including (name (EC/CAS) concentration): Metallic zinc (231-175-3/7440-66-6) 70-85%, Zinc oxide (215-222-5/1314-13-2) 10-20%, Nickel (231-111-4/7440-02-0) 0,00-2,0%.

The product is formed after smelting of zinc-nickel alloys. Mainly consists of pure metal and oxides. Contains small amounts of nickel.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Zinc in massive form is not hazardous. During production and use the following hazardous derivatives may be formed: Respirable zinc-bearing particles and soluble zinc compounds.

General advice: Get medical attention if any discomfort develops. Show this sheet to doctor. General advice: Get medical attention if any discomfort develops.

Inhalation

In case of difficulties breathing, the victim must be brought to fresh air and placed in a resting position, making it easy to breathe. Stay with the patient. In case of respiratory symptoms: Contact Poisons Information Center or a physician.

Skin contact

Remove contaminated clothing and shoes at once. Skin that has come in contact with the material must be washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

Eye contact

Remove contact lenses. Flush eyes immediately with plenty of water (20-30 °C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. If irritation continues, contact a doctor.

Ingestion

Give the person plenty to drink and stay with the person. If the person feels unwell, contact a doctor immediately and take this safety data sheet or the label from the product with you. Do not induce vomiting unless recommended by the doctor. Hold head facing down so that no vomit runs back into the mouth and throat.

According to EC-Regulation 1907/2006 (REACH)

Burns

Rinse with water until the pain stops and continue for 30 minutes.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation: Burning in eyes, nose, mouth and throat. Can cause metal fever (with symptoms similar to influenza), including coughing and high fever. Symptoms usually go away in 1-2 days.

Skin contact: Burning, redness.

Eye contact: Spraying can cause combustion.

Ingestion: Burning in mouth and throat. Nausea, vomiting, stomach ache, diarrhea.

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

No special

Information to medic

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Water jets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

If zinc particles come in contact with water, flammable hydrogen gas can form.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep humans and animals away from the polluted area. Ensure that every work station is equipped with adequate ventilation, that the work space, construction and equipment is compliant with statutory requirements and that the personnel uses personal protective equipment in accordance with the instructions for protection. See section 8.

In case of major incidents evacuate the area.

6.2. Environmental precautions

The heavy metal in the product is harmful to the environment. Limit spreading of the product and prevent discharge into ground water, water courses and drains.

6.3. Methods and material for containment and cleaning up

Collect spill in labelled and closed containers. The product is considered hazardous waste.

6.4. Reference to other sections

See section on "Disposal considerations" with regard to the handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

See section on 'Exposure controls/personal protection' for information on personal protection.

Eye wash stations and emergency showers must be available where this product is handled.

Avoid:

Spreading of dust.

Inhalation of dust/particles.

Skin contact.

Avoid finely powdered concentrations of the substance in the air, since this can cause a dust explosion.

Use local exhaust ventilation if it is technically possible.

Prevent discharge to soil, water courses and drains.

Do not eat, drink or smoke at the work place.

Wash hands after handling the substance.

Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original.

Storage temperature

According to EC-Regulation 1907/2006 (REACH)

No data available.

7.3. Specific end use(s)

This product should only be used for applications described in Section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

Zinc oxide, fume or respirable dust CAS 1314-13-2
 Limit value - Eight hours: 5 mg/m³
 Limit value - Short term: 10 mg/m³

DNEL / PNEC

No data available.

8.2. Exposure controls

No control is necessary if the product is used in a normal way.

General recommendations

Observe general occupational hygiene.

Exposure scenarios

If there is an appendix to this safety data sheet, the indicated exposure scenarios must be complied.

Exposure limits

Trade users are covered by the rules of the working environment legislation on maximum concentrations for exposure. See work hygiene threshold values above.

Appropriate technical measures

Take ordinary precautions when using the product. Avoid inhalation of gas or dust.

Hygiene measures

Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment

-

Generally

Only CE-marked personal protection equipment should be used.

Respiratory Equipment

Respiratory protection (dust mask with P2 filter) must be used under conditions that generate dust.

Skin protection

Use suitable protective clothing.

Hand protection

Use protective gloves made of natural rubber, neoprene or PVC. Change gloves regularly.

Eye protection

Use protective goggles or face mask.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Colour	Odour	pH	Viscosity	Density (g/cm ³)
Solid	Gray	None	-	-	4,12

Phase changes

Melting point (°C)	Boiling point (°C)	Vapour pressure (mm Hg)
133	-	-

Data on fire and explosion hazards

Flashpoint (°C)	Ignition (°C)	Self ignition (°C)
Not applicable	-	Not applicable

Explosion limits (Vol %)	Oxidizing properties
Not applicable	Not applicable

Solubility

Solubility in water	n-octanol/water coefficient
Insoluble	-

9.2. Other information

According to EC-Regulation 1907/2006 (REACH)

Solubility in fat

-

Additional information

Bulk density (kg/dm³) 1,2-1,3 kg/dm³

SECTION 10: Stability and reactivity

10.1. Reactivity

Metallic zinc reacts with acids, alkalis and strong oxidizing compounds. In contact with water, flammable hydrogen gas can form. Zinc oxide reacts violently with some aluminium and magnesium powders and with chlorinated rubber.

Keep away from heat, water, acids and oxidizing substances.

10.2. Chemical stability

The product is stable under the conditions, noted in the section on "Handling and storage".

10.3. Possibility of hazardous reactions

In contact with water, flammable hydrogen gas can form.

10.4. Conditions to avoid

Metallic zinc must not be exposed to acids, alkalis, dust or water.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reductants agents.

10.6. Hazardous decomposition products

Metallic zinc reacts with acids and alkalis and forms hydrogen gas; an inflammable, explosive, odorless gas which is lighter than air.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Substance	Species	Test	Route of exposure	Result
Zinc	Rat	LD50	Oral	> 2000 mg/kg body weight
Zinc	Rat	LC50	Inhalation (4h)	> 5,41 mg/l
Zinc oxide	Rat	LD50	Oral	> 5000 mg/kg body weight
Zinc oxide	Rat	LC50	Inhalation (4h)	0,4 mg/l
Nickel	Rat	LD50	Oral	> 5000 mg/kg body weight

Skin corrosion/irritation

Burning, redness. Dust and metal oxide can irritate the skin.

Inhalation

Metallic zinc is not hazardous by inhalation. During processing (heating or grinding), zinc oxide or zinc dust can be emitted. Inhalation of zinc oxide or zinc vapour can cause zinc fever. Nickel oxide smoke can cause cancer if inhaled.

Smoke from zinc oxide can cause serious irritation of the respiratory organs and mucous membranes, dry mouth, head ache, nausea and dizziness. Inhalation of such smoke/vapour can cause zinc fever, a transient state resembling influenza. The symptoms appear after about 1-2 days and will not cause permanent damage.

Ingestion

Swallowing zinc and zinc compounds can cause stomach irritation.

Serious eye damage/irritation

Spraying can cause combustion. Dust and metal smoke can irritate the eyes.

Respiratory or skin sensitisation

Can cause allergy by inhalation and skin contact.

Nickel oxide can cause skin sensitization by skin contact.

Germ cell mutagenicity

Suspected of causing genetic damage.

Carcinogenicity

No data available.

Reproductive toxicity

May impair reproductive function and fetus.

STOT-single exposure

No data available.

According to EC-Regulation 1907/2006 (REACH)

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Long term effects

Can harm internal organs.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Species	Test	Test duration	Result
Zinc	Fish	LC50	96h	0.116 mg/l
Zinc	Daphnia Magna	EC50	48h	0.068 mg/l
Zinc oxide	Fish	LC50	96h	1.1 mg/l
Zinc oxide	Daphnia Magna	EC50	48h	24.6 mg/l
Nickel	Fish	LC50	96h	> 100 mg/l
Nickel	Daphnia Magna	EC50	48h	> 100 mg/l
Nickel	Algae	IC50	72h	0.18 mg/l

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
	The product is not biodegradable.		

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BFC
Contains small amounts of nickel which is harmful to the environment and accumulates in nature. Contains zinc compounds which can be absorbed into for example mussels and seaweed.			

12.4. Mobility in soil

Not soluble in water.

12.5. Results of PBT and vPvB assessment

The PBT and vPvB criteria do not apply to inorganic substances.

12.6. Other adverse effects

The heavy metals in this product are harmful to the environment.
The product is delivered as a solid metal and does not present any harm to the aquatic environment in the form as it is put on the market.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The product is covered by the regulations on dangerous waste.

Waste

EWC code
06 04 05, 10 05 10

Specific labelling

-

Contaminated packing

Packaging which contains leftovers from the product must be disposed of in the same way as the product.

SECTION 14: Transport information

Not listed as dangerous goods under ADR and IMDG regulations.

14.1 – 14.4

ADR/RID

- 14.1. UN number
- 14.2. UN proper shipping name
- 14.3. Transport hazard

According to EC-Regulation 1907/2006 (REACH)

class(es)

14.4. Packing group

Notes

Tunnel restriction code

IMDG

UN-no.

Proper Shipping Name

Class

PG*

EmS

MP**

Hazardous constituent

IATA/ICAO

UN-no.

Proper Shipping Name

Class

PG*

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available

(*) Packing group

(**) Marine pollutant

SECTION 15: Regulatory information

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

Restrictions for application

-

Demands for specific education

-

Additional information

-

Sources

EC regulation 1907/2006 (REACH)

Directive 2000/532/EC

EC Regulation 1272/2008 (CLP)

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

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The full text of identified uses as mentioned in section 1

-

Other symbols mentioned in section 2

-

Other

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

According to EC-Regulation 1907/2006 (REACH)

A change (in proportion to the last essential change (first cipher in SDS version)) is marked with a blue triangle.

Emergency numbers

Belgium: 070 - 245 245

Austria: Poison Control Centre Emergency helpline +43 1 406 43 43, 112

Portugal: Em caso de intoxicacao, ligue 808 250 143

Czech Republic: Toxikologické informační středisko Telefon: +420 224 919 293, +420 224 915 402

Estonia: 112, 16662, ((+372) 626 93 90)

Lithuania: Visuomenės sveikatos centrams +370 5 236 20 52 arba +370 687 53378

Italy: Centro antiveleni di Roma - Policlinico Umberto I tel. 06-49978000

Spain: Servicio de Información Toxicológica Teléfono: + 34 91 562 04 20 (solo emergencias toxicológicas)

Información en español (24h/365 días)

Sweden: 112, 08-331231 (vardagar kl 9-17)

United Kingdom: 999 (or 111 for non-emergency medical advice). Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department or the NHS enquiry service)

Denmark: Kontakt Giftlinien på tlf.nr.: 82 12 12 12 (åbent 24 timer i døgnet).

Germany: Giftnotruf Berlin, Emergency telephone: +49 30 19240 (Tag und Nacht)

Finland: 09-4711/Myrkytystietokeskus tai suora numero 09-471977 Myrkytystietokeskus/HUS,

Tukholmankatu 17, 00029 HUS (Helsinki) 112

Norway: Giftinformasjonssentralen på tlf.nr.: 22 59 13 00, 113

France: ORFILA (INRS) : + 33 (0)1 45 42 59 59. 24 heures sur 24 et 7 jours sur 7

Hungary: Telefon: 06-80-20-11-99

Iceland: Neyðarlínan: Sími 112. Eitrunarmiðstöð Landsspítalans. Sími: 543 2222.

Netherlands: 30-2748888

Bulgaria: +359 2 9154 409

Greece: +30 10 779 3777

Ireland: +353 1 8379964

Latvia: +371 704 2468

Malta: 2425 0000

Poland: +48 58301 65 16 / +48 58 349 2831

Romania: +40 21 3183606

Slovakia: +421 2 54 77 4166

Slovenia: + 386 41 650500

Date of last essential change (First cipher in SDS version)

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Date of last minor change (Last cipher in SDS version)

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