



Ferronickel Slag

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Version: 4.0

Safety Data Sheet

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

1.1. Product identifier

Trade name : Ferronickel SLAG
The Sland,

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

1.2.1. Relevant identified uses

Main use category : Aggregate for concrete, sandblasting.

1.2.2. Uses advised against

None know.

1.3. Details of the supplier of the Safety Data Sheet

ERAMET SA
Tour Maine-Montparnasse
75755 Paris cedex 15 - France
T 33(0)1-45-38-62-56 - F 33(0)1-45-38-73-48
msds.ni@erametgroup.com - www.eramet.fr

1.4. Emergency telephone number

Emergency number : Australia : dial 112 or 000

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

No labelling applicable.

2.3. Other hazards

This substance does not meet the PBT criteria of REACH, annex XIII. This substance does not meet the vPvB criteria of REACH, annex XIII.

Glassy particules inside the material, may be a slight skin irritant, during handling operation.

SECTION 3: Composition/information on ingredients

3.1. Substances

Slag from SLN process is mainly constituted of glossy magnesium silicate structure, Forsterite ((Mg,Fe)₂SiO₄) and Enstatite ((Mg,Fe)SiO₃). This slag contains less than 0,1% Ni. One part of Ni is on nickel metal form (60 – 70%), the other part is in substitution of Mg in the glossy magnesium silicate structure. The slag does not contain any free magnesia nor crystalline silica (quartz, tridymite, cristoballite).

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--------------------|---------------------|-------------|---|
| Silica | (CAS No.) 7631-86-9 | 50% – 55% | Not classified |
| Magnesium oxide | (CAS No.) 1309-48-4 | 30% - 35% | Not classified |
| Iron(II) oxide | (CAS No.) 1345-25-1 | 10% – 15% | Not classified |
| Aluminium trioxide | (CAS No.) 1344-28-1 | 1% - 3% | Not classified |
| Chromium oxide | (CAS No.) 1308-38-9 | 2 % | Not classified |
| Calcium Oxide | (CAS No.) 1305-78-8 | 0,2 – 0,6 % | Not classified |

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

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. In all cases of doubt, or when symptoms persist, seek medical advice.
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Medical examination necessary even merely on suspicion of intoxication.
- First-aid measures after skin contact : After contact with skin, wash immediately with plenty of water and soap. Wash contaminated clothing before reuse. In case of skin irritation, consult a physician.
- First-aid measures after eye contact : In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.
- First-aid measures after ingestion : If swallowed, rinse mouth with water (only if the person is conscious).

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

No additional information available

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

In case of doubt or persistent symptoms, consult always a physician.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : The product itself does not burn.
- Explosion hazard : not explosive.
- Reactivity : The product is stable at normal handling- and storage conditions.

5.3. Advice for firefighters

Precautionary measures fire : Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Prevent unauthorised access. See protective measures under point 7 and 8.

6.1.1. For non-emergency personnel

Protective equipment : Use personal protective equipment as required.

6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Avoid generation of dust. Do not inhale dusts, where present.

Hygiene measures : Do not eat, drink or smoke when using this product.

Wash contaminated clothing before reuse. Handling with gloves, some glossy particules inside may be slight skin irritant.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Minimize generation of dust.

Special rules on packaging : Repeat the labelling if the packaging is divided up.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The material is not dangerous, so the applicable limits for total dust (inhalable and respirable are used).

| TLV-TWA on 8 hrs | Germany (AGS) | USA (ACGIH) |
|------------------|------------------------|------------------------|
| Inhalable dust | 10 mg/ Nm ³ | 10 mg/ Nm ³ |
| Respirable dust | 3 mg/ Nm ³ | 5 mg/ Nm ³ |

8.2. Exposure controls

Appropriate engineering controls : Technical measures and the application of suitable work processes have priority over personal protection equipment.

Personal protective equipment : Protective clothing. In case of dust production: protective goggles. Gloves. Dust production: dust mask with filter type P3.



Materials for protective clothing : Wear suitable gloves.

Hand protection : Wear suitable gloves.

Eye protection : Dust protection eye glasses.

Skin and body protection : Wear suitable protective clothing and gloves.

Respiratory protection : If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---|
| Physical state | : Solid |
| Colour | : Green. |
| Odour | : odourless. |
| pH | : Not applicable, practically insoluble |
| Melting point | : > 1500°C |
| Boiling point | : > 2000°C |
| Flash point | : Not applicable |
| Flammability (solid, gas) | : Not applicable |
| Explosive limits | : No explosible |
| Vapour pressure | : Not applicable |
| Relative vapour density at 20 °C | : Not applicable |
| Relative density | : 1.3 to 1.5 |
| Solubility | : No data available |
| Partition coefficient: n-octanol/water | : No data available |
| Self ignition temperature | : Not applicable |
| Decomposition temperature | : Not applicable |
| Viscosity | : Not applicable |
| Explosive properties | : No explosible |
| Oxidising properties | : Not applicable |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable at normal handling- and storage conditions.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Avoid generation of dust.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|--|------------------|
| Acute toxicity | : Not classified |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitisation | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity (single exposure) | : Not classified |
| Specific target organ toxicity (repeated exposure) | : Not classified |
| Aspiration hazard | : Not classified |

SECTION 12: Ecological information

12.1. Toxicity

SLAND is not classified as an aquatic hazard, based on its content of Nickel and its respective aquatic toxicity. Additional tests on EFS showed no direct effect on aquatic organisms.

12.2. Persistence and degradability

Due to the inorganic character of the substance and the absence of chemical groups susceptible to hydrolysis, biodegradation is not a concern.

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Slag

This substance/mixture does not meet the PBT criteria of REACH, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH, annex XIII.

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.

Waste treatment methods : Do not empty into drains.

SECTION 14: Transport information

No dangerous good in sense of transport regulations.

SECTION 15: Regulatory information

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

15.1.1. Worldwide Chemical Inventories

No REACH Annex XVII restrictions. Contains no REACH candidate substance.

MITI (Japan): all components are listed in Handbook

TSCA (USA): all components are listed in TSCA

ECL(Korea): all components are listed in ECL

DSL(Canada): all components are listed in DSL

AICS (Australia): all components are listed in AICS

IECSC(China): all components are listed in IECSC

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms : CAS Chemical Abstract Service
REACH Registration, Evaluation, Autorisation of CHemicals

Other information : The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this Safety Data Sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this Safety Data Sheet is not necessarily valid for the new made-up material.

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.