ERAMET

Ferronickel Slag

Date of issue: 27/10/2017

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

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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 constitued 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.

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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 no 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/ Nm3	10 mg/ Nm3
Respirable dust	3 mg/ Nm3	5 mg/ Nm3

8.2. Exposure controls

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

personal protection equipment.

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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

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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 : Not classified

exposure)

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

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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

CAS Chemical Abstract Service

acronyms

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.

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