

SAFETY DATA SHEET

MAGNETITE

According to 1907/2006/EC, Article 31

Revision date: 01.08.2012



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

1.1 Product Identifier:

Trade Name: Magnetite II F
EC Number: 310-127-6
CAS Number: 999999-99-4

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

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
PROC2 Use in closed, continuous process with occasional controlled exposure
PROC3 Use in closed batch process (synthesis or formulation)
PROC4 Use in batch and other process (synthesis) where opportunity for exposure arises
PROC8a Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
PROC8b Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC26 Handling of solid inorganic substances at ambient temperature

1.3 Details of the supplier of the safety data sheet:

FirstAlloys SA.
11 rue Albert Philippe
L-2331 Luxembourg
Luxembourg

1.4 Emergency telephone number:

Tel.: INT +49 201 125 38 30

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 The substance is not classified according to the CLP regulation.

2.2 Label Elements

Labelling according to Regulation (EC) No 1272/2008:

Hazard pictograms: Not applicable
Signal word: Not applicable
Hazard statement: Not applicable

SECTION 3: Composition / Information on Ingredients

3.1 Chemical characterization: Substances

CAS No. Designation 999999-99-4 naturally occurring substance, not chemically modified: magnetite ore
EC Number: 310-127-6

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SECTION 4: First Aid Measures

4.1 Description of first aid measures:

General information:	No Special measures required
After inhalation:	Supply fresh air; consult doctor in case of symptoms
After skin contact	The product is not skin irritating.
After eye contact:	Rinse opened eye for several minutes under running water.
After swallowing:	In case of persistent symptoms consult doctor.

4.2 Most important symptoms and effects, both acute and delayed: No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed: No further relevant information available.

SECTION 5: Firefighting Measures

5.1 Extinguishing media Suitable extinguishing agents:	CO ₂ , extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
5.2 Special hazards arising from the substance or mixture:	No further relevant information available.
5.3 Advice for firefighters Protective equipment:	No special measures required.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:	Avoid causing dust.
6.2 Environmental precautions:	Damp down dust with water spray jet.
6.3 Methods and material for containment and cleaning up:	Dispose of the material collected according to regulations.
6.4 Reference to other sections:	No dangerous materials are released. See Section 7 for information on safe handling.

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SECTION 7: Handling and Storage

Handling:

7.1 Precautions for safe handling Provide extractors if dust is formed

Information about protection against explosions and fires: No special measures required.

7.2 Conditions for safe storage, including any inculpabilities:

Requirements to be met by storerooms and containers: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

7.3 Specific end use (s): No further relevant information available.

SECTION 8: Exposure controls/Personal Protection

Additional information about design of technical systems: No further data; see item 7

8.1 Control parameters Components with critical values that require monitoring at the workplace: DNELs

Worker Systemic long-term effects, inhalative: 10 mg/m³
Local long-term effects, inhalative: 10 mg/m³

PNECs Iron is an essential trace element for fish, aquatic invertebrates and plants. A direct toxicity could not be demonstrated in tests. Therefore no PNEC was derived.

Additional Information The lists that were valid during the compilation were used as basis.

8.2 Exposure controls Personal protective equipment: General protective and hygienic measures:

The usual precautionary measures should be adhered to in handling the chemicals.

Breathing equipment: EN 149: FFP2

Protection of hands: Requirements according to EN 420
Check protective gloves prior to each use for their proper condition, Preventive skin protection by use of skin-protecting agents is recommended.

Material of gloves: Leather gloves

Penetration time of glove material: Not applicable

Eye protection: Not required.

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Body protection: Protective work clothing

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Appearance:	Powder
Colour:	Black
Smell:	Odourless
	See chapter 16 for additional information
Odour threshold:	Not relevant
pH-value (50 g/l) at 20°C	4 – 8

Change in condition:

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	>1000°C
Flash point:	Not applicable
Flammability (solid, gaseous):	Not determined
Ignition temperature:	Not applicable
Decomposition temperature:	Not determined.
Self-flammability:	Product is not selfigniting
Danger of explosion:	Product is not explosive
Vapour pressure:	Not applicable
Density at 20°C:	4.6-5.0 g/cm ³
Apparent density at 20°C:	600 – 800 kg/m ³
Vapour density:	Not applicable
Evaporation rate:	Not applicable

Solubility in / Miscibility with Water:	Insoluble
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Partition coefficient (n-octanol/water):	Not applicable
Viscosity dynamic:	Not applicable
Kinematic:	Not applicable

9.2 Other information: No further relevant information available.

SECTION 10: Stability and Reactivity

10.1 Reactivity:

10.2 Chemical stability No decomposition if used according to specifications.

Thermal decomposition / conditions to be avoided:

10.3 Possibility of hazardous reactions: No dangerous reactions known

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- 10.4 Conditions to avoid:** No further relevant information available.
- 10.5 Incompatible materials:** No further relevant information available.
- 10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects:

Acute toxicity:

LD/LC50 values that are relevant for classification:

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Oral LD50 > 5000 mg/kg (RAT)

Primary irritant effect:

On the skin:

No irritant effect

On the eye:

Eye exposure (to dust) may produce irritation.

Sensitization:

No sensitizing effect known.

Subacute to chronic toxicity:

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Oral NOAEL no relevant data available

Dermal NOAEL no relevant data available

Inhalative NOAEC 10.1 mg/m³ (Rat, OECD 412)

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

There are no indications of CMR effects.

Specific target organ toxicity (STOT)

No specific target organ toxicity according to the criteria defined in Regulation (EC) No. 1272/2008.

SECTION 12: Ecological Information

- 12.1 Toxicity:** Based on the composition aquatic toxicity is not to be expected.
- 12.2 Persistence and degradability:** Not relevant for inorganic substances.
- 12.3 Bioaccumulative potential:** Iron is a bioessential trace element for organisms and plays an important role in biological processes. The uptake of iron is strictly controlled by homeostatic process. In conclusion, bioaccumulation poses no concern.
- 12.4 Mobility in soil**
Additional ecological information: No further relevant information available.
- General notes:** Separation by sedimentation
- 12.5 Results of PBT and vPvB assessment:**
- PBT** Not applicable
- vPvB** Not applicable
- 12.6 Other adverse effects:** No further relevant information available.

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SECTION 13: Disposal Considerations

13.1 Waste treatment

methods recommendation: Smaller quantities can be disposed with household garbage.

European waste catalogue: Waste code number according to origin of waste

Uncleaned packaging:

Recommendation: Disposal according to official regulations

SECTION 14: Transport Information

14.1 UN Number

ADR , AND, IMDG , IATA Not applicable

14.2 UN proper shipping name Not applicable

ADR , AND, IMDG , IATA

14.3 Transport hazard class(es): Not applicable

ADR , AND, IMDG , IATA

14.4 Packing Group Not applicable

ADR , IMDG , IATA:

14.5 Environmental hazards: Not applicable

14.6 Special precautions for user: Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15: Regulatory Information

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

National regulations:

Technical instructions (air):

Water hazard class: Not hazardous for water

15.2 Chemical Safety assessment

Substances of very high concern (SVHC) according to REACH, Article 57 The product is not listed as SVHC, it does not contain any substances of very high concern.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other Information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Possible odour nuisance can occur due to residual traces of the flotation aid. The concentration of the flotation aid on the ore is below chemical detection level. Nevertheless, odorant accumulation in the air above the product is possible which can be perceived as a nuisance. Therefore, health hazard for workers can be regarded as highly unlikely.

Abbreviations and acronyms:

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- ICAO: International Civil Aviation Organization
- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association

- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent