

SAFETY DATA SHEET

Heegermaterials

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

Product name :

FERRO BORON

Supplier :

**Heeger Materials Inc.
230 Steele St Denver
CO 80206
United States
Tel: 925-385-8104
E-mail : sales@heegermaterials.com**

Emergency phone number (to be used by the practising doctor) :

UK - National Poisons Information Service Phone : 44/191 22 5131
B - Centre Antipoisons Phone : 070/245.245

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name of the substance :

FERRO BORON

Description of the preparation :

Dry mixture.
Powder inside steel tube/pipe.

Component(s) contributing to the health hazard :

None according to EC directives.

3. HAZARDS IDENTIFICATION

Most important hazards :

Eye irritation.
Irritating to respiratory system.

Specific hazards :

Dusts flammable with the flame contact.

4. FIRST AID MEASURES

Inhalation :

If unconscious, place in the recovery position and seek medical advice.
Give oxygen or artificial respiration if necessary.

Skin contact :

Rinse thoroughly with plenty of water for at least 20 minutes and take medical advice.

Eye contact :

Wash with plenty of water (during 20 minutes minimum) with eyes wide open after taking off soft contact lenses and immediately take medical advice.

Ingestion :

If swallowed, seek medical advice immediately and show this container or label.
Prevent vomiting if possible.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media :

Dry sand, special powder.

Extinguishing media which must NOT be used for safety reasons :

Do not use water jet.

6. ACCIDENTAL RELEASE MEASURES

Personal precaution(s) :

Avoid dust formation.

Exclude sources of ignition and ventilate the area. Exclude non-essential personnel. Avoid breathing vapours. Refer to protective measures listed in Sections 7 and 8.

Avoid contact with skin, eyes, or clothing.

Environmental precaution(s) :

Do not allow to enter drains or water courses.

If the product enters drains or sewers the local water company should be contacted immediately ; in the case of contamination of streams, rivers or lakes, the National Rivers Authority.

Method(s) for cleaning up :

Clear up rapidly by scoop or vacuum.

Shovel into suitable and closed container for disposal.

7. HANDLING AND STORAGE

Handling

- Precaution(s) :

The Manual Handling Operations Regulations may apply to the handling of containers of this product. Refer to the guide weight indicated on the container when carrying out assessments.
Strict hygiene required.
Wear personal protective equipment (see item 8).

- Technical condition(s) :

Avoid dust formation.

- Safe handling advice(s) :

Keep container tight closed.

Storage

- Precaution(s) :

Observe the label precautions.

- Storage condition(s) :

Store in a dry place.
Keep in a well-ventilated room.

- Packaging/tank material :

Made of the same material as the supply container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measure(s) :

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Control parameter(s) :

- Exposure limit(s) :

If outside the FRANCE, the user should consult the appropriate literature to determine the relevant standard(s).

- Recommended monitoring procedures :

Personal protection equipment :

- Respiratory protection:
In case of breathable dust and/or fumes, use a self-contained breathing apparatus.
- Hand protection :
Wear suitable gloves.
- Skin and body protection :
Wear suitable protective clothing.
- Eye protection :
Eye protection designed to protect against exposure to dusts should be worn when there is a likelihood of exposure.

Hygiene measure(s) :

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state/form : powder inside steel tube/pipe.
Colour : dark grey.
Odour : none.
pH : S/O solid.
Melting point/range : 1600°C~
Auto-ignition temperature : N/A
Decomposition temperature : N/A
Explosion limits : Not applicable.
Flammability (solid, gas) : N/A
Oxidation properties : N/A
Vapour pressure : N/A
Vapour density : N/A
Relative density (water = 1) : 4.6 g/cm³
Water solubility : insoluble.
Fat solubility : Not determined.
Solvent solubility : No data available.

10. STABILITY AND REACTIVITY

Stability :

Stable under the recommended storage and handling conditions. (See Section 7).

The product should be kept dry.

Condition(s) to avoid :

The product should be kept dry to avoid the hazard of being in a wet or

damp condition when added to molten metal. Avoid extremes of temperature and humidity. The product is stable air at normal room e,

Material(s) to avoid :

Iron dust is incompatible with CL₂, H₂, O₂, H₂, SO₄ and polystyrene.

Hazardous decomposition products :

No data available.

11. TOXICOLOGICAL INFORMATION

General information(s) :

There is no data available on the product itself.

Acute toxicity

- Inhalation :

As with all nuisance dust, excessive and repeated exposure may harm the respiratory tract.

- Skin contact :

Irritation, pain and redness may result at the point of contact.

- Eyes contact :

May cause irritation and pain at the point of contact.

- Ingestion :

May cause soreness of throat and mild abdominal pain.

Chronic toxicity :

Chronic effects are not likely if dust exposure levels are adequately controlled.

Specific effect(s) :

Excessive ingestion may result in vomiting and diarrhoea. Eye contact with dust may cause conjunctivitis and other disorders.

12. ECOLOGICAL INFORMATION

Environmental toxicity :

The product is insoluble in water.

Prolonged contact with soil or water following spillage or inappropriate disposal may lead to localised environmental contaminations.

Toxicity to fish :

The majority of any quantity released into water will ultimately be deposited in the sediment.

13. DISPOSAL CONSIDERATIONS

Waste/unused products :

Collect all waste in suitable and labelled containers and dispose according to local legislation.

Contaminated packaging :

Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

14. TRANSPORT INFORMATION

General information(s) :

There are no special precautions for the transport or conveyance of this product.

UN No : No data available.

15. REGULATORY INFORMATION

Labelling :

The product does not need to be labelled in accordance with EEC directives on classification, packaging and labelling of dangerous substances.

EC number : Not applicable.

Symbol (s) : N - Dangerous for the environment.

R-phrase(s) :

None according to EC directives.

S-phrase(s) :

S : 22

Do not breathe dust.

S : 25

Avoid contact with eyes.

Further information(s) :

16. OTHER INFORMATION

Important remarks :

As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

The user is always responsible for ensuring that the requirements of relevant legislation are complied with.

The information contained in this safety data sheet is based on the present state of knowledge and current national legislation.

Restrictions :

The product should not be used for purposes other than those shown in Section 16 without first referring to the supplier and obtaining written handling instructions.

References and/or bibliography :

EH 40/95 Occupational Exposure Limits 1995 publ HSE 1995. Revised annually.
Sax, NI Dangerous Properties of Industrial Materials publ VAN NOSTRAND REINHOLD 1984.