

ISOTROPIC STRONTIUM FERRITE MAGNET | MATERIAL SAFETY DATA SHEET

ISO 9001 and ISO 14001 Certified
Version 1.0

Date of Preparation: August 20, 2003

SECTION 1. CHEMICAL IDENTITY

Chemical name: Isotropic Strontium Ferrite Magnet
Common name: Rubber Magnet
Product Article No.: 200.046
MSDS reference identity: MH001-A-0412

SECTION 2. COMPOSITION AND INFORMATION ON INGREDIENTS

The chemical is a mixture

Chemical name: Strontium Ferrite ($\text{SrO} \cdot 6\text{Fe}_2\text{O}_3$)
Hazardous Ingredients: SrCl_2 . Standard content of SrCl_2 (GB/T114848-93) Standard of underground water quality: class I, 0.01; class II, 0.1; class III, 1.0; class IV, 4.0; class V, more than 4.0; TLV of the hazardous material in drinking water is 0.7mg/1; (Industry standard): TLV-TWA 0.5mg/m³; STEL 0.5mg/m³
CASE NO.10361-37-2

SECTION 3. HAZARDS IDENTIFICATION

Hazard Classification: Strontium Ferrite (un-listed), SrCl_2 is hazardous.
Ingestion: inhalation
Harm: Strontium Ferrite has little toxicity. However, it contains soluble barium salt such as SrCl_2 and SrNO_3 that is seriously hazardous when it is ingested. It will cause gastrointestinal tract distress, muscle anaesthetization and myocardial infarction which leads to death. Inhalation dusts and particulates of soluble barium compound may cause accurate barium toxicosis which appears mostly like oral administration toxicosis but the response of alimentary tract is quicker. Worker who contacts barium compound for a long time may appear drooly, faint, rhinolaryngitis, increasing blood pressure and losing hair and so on. Prolonged contact with dusts of barium compound such as vitriolic barium may cause pneumoconiosis.
Environment harm: chemical reaction has high stability and it won't cause harm to environment.
Fire hazard: no information

SECTION 4. FIRST AID MEASURES

Shin: remove any contaminated clothing and wash thoroughly with soap and water. Eyes: flush with running water for holding the eyelids wide open. Seek medical attention and doctor.
Inhalation: remove exposed person to fresh air. If breathing is difficult, oxygen may Ingestion: Drink enough water to induce vomiting. Flush the stomach with 2% to 5% BaNO_3 liquid to induce lax. Seek medical treatment.

SECTION 5. FIRE FIGHTING MEASURES

Hazard characteristic: no information
Harmful burning product: CO_2 , CO
Fire fighting methods: water, foam and sand
Fire fighting per-caution: no information

SECTION 6. ACCIDENTAL RELEASE MEASURES

Emergency handling: separated from the exposed area and forbid anyone to enter. A self contained breathing apparatus operating in the positive pressure mode and full fire fighting protective clothing should be worn for combating fires. Don't contact the scoop to dry and clean container. Large amount release: covered with plastic and canvas to reduce dust. Then collect or recycle them to trash handling place.

SECTION 7. HANDLING AND STORAGE

Operating advice: wear anti-dust respirator in the processing of powder.
Storage advice: keep the warehouse ventilated, low-temperature and dried; separate from food additive and acid food.

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SECTION 8. CONTACT CONTROL/PERSONAL PROTECTION

OLV: no information
 Test method: no industry test method but the lab test method is available.

Test method	Source	Classification
Colorimetry	EPA method 9250,9251	Water quality
Titration	EPA method 9252	Water quality
Plasma spectrum	EPA method 200.7	Water quality
Atom absorb	EPA method 7080	Water quality
Barium sulfate	Chemical Industry harmful material in the air testing method,	Chemical Industry Air

Project control: The working area should keep close during the producing of powder, good exhaust fan is needed and safe shower and clean water must be supplied!

Respirator system protection: no special protection is needed in normal condition; filtrating respirator is needed in the processing of powder.

Eyes protection: no special protection is needed in normal condition.

Body protection: no special protection is needed in condition, wear common clothes.

Hand protection: no special protection is needed in normal condition.

Other protection: no special protection is needed in normal condition

SECTION 9. PHYSICAL CHARACTERISTIC

Appearance and property: magnetic powder is black, and the finished product is strip.

PH value: solid, no test recorder.

Melting point: 965 °C; Density (Water=1):3.86. (SrCl₂)

Boiling point: 1560°C; Vapor density (Air=1): No information available.(SrCl₂)

Vapor pressure: no information available

Critical temperature and pressure: no information available

Flash point: no information available

Auto ignition temperature: no information available

Solubility: this product is indiscrptible.

The toxicant SrCl₂ is soluble in water but indiscrptible in acetone and ethanol, slightly soluble in acetic acid and vitriol.

Main usage: refrigeratory, icebox and disinfector's airproof

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SECTION 10. STABILITY AND REACTIVITY

Stability:	the product is very stable.
Incompatibility:	Boron trifluoride
Condition to avoid:	non-direct contact
Polymerization harm:	exquisite reactivity
Disassemble product:	H ₂ Cl, SrO

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity:	LD50 118mg/kg (SrCl ₂)
Irritant:	no information available
Sensitizer:	no information available
Mutagen:	no information available
Carcinogen:	no information available
Other:	no information available

SECTION 12. ECOLOGICAL INFORMATION

Detailed studies have not been conducted concerning the environmental fate of the product.

SECTION 13. DISPOSAL CONSIDERATIONS

Characteristic of the castoff:	industry castoff
Method of disposal:	burning
Advice of disposal:	no information available

SECTION 14. TRANSPORT INFORMATION

Hazardous goods reference:	no
UN reference:	no
Shipping mark:	no
Shipping classification:	no requirement
Packing method:	common paper packing or wooden pallet packing
Shipping advice:	no

SECTION 15. REGULATORY INFORMATION

Regulatory information: Hazardous Chemical Safety Administration Rule (Issue by State Department on Feb.17, 1987).
Chemical Safety Administration Rule and Implementary Details (Chemical Department issue (1992) NO.667), GB 13690-92 ,
Common Hazardous Chemical Classification and Symbol.

SECTION 16. OTHER INFORMATION

Reference:	GB16483-2000, (Chemical Safety Technical Sheet Specification) GB13690-92, (Common Hazardous Chemical Classification and Symbol)
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