

РОССИЙСКАЯ ФЕДЕРАЦИЯ
ОТКРЫТОЕ АКЦИОНЕРНОЕ ОБЩЕСТВО
ЧЕЛЯБИНСКИЙ
ЭЛЕКТРОМЕТАЛЛУРГИЧЕСКИЙ
КОМБИНАТ



454081, г. Челябинск ОАО "ЧЭМК". Телефон: (3512) 72-63-10, Телефакс: (3512) 72-63-73, Телекс: 124126 "БЕЛКА"

MATERIAL SAFETY DATA SHEET

Date: March 10th 2006

This document covers 15 numbered sections

1. Identification of the material and the company

Name of product: Ferrosilicon (FeSi) – 75% Si
Producer: JSC "Chelyabinsk Elektro-Metallurgical Integrated Plant,
Chelyabinsk, Russia
Telephone: +7 3517 726310
Telefax: +7 3517 726373

2. Composition and information on the substances

<u>Chemical name</u>	<u>CAS-No</u>	<u>Concentration</u>	<u>Symbols</u>	<u>Risk-phases</u>
Ferrosilicon	8049-17-0	75% Silicon	not applicable	not applicable

Chemical elements

Si 75%, Al 1,0-2,5%, C 0,1%, S 0,02%, P 0,04%, Mn 0,4%, Cr 0,3%

3. Hazard identification

Ferrosilicon in dry and dustfree condition does not lead to health effects by normal handling.

A high dust concentration may by inhalation cause irritation on membranes. Skin and eyes may also be irritated. Ferrosilicon being exposed to moisture (damp air, dampness) will evolve small quantities of hydrogen, phosfine and arsine gas. The tendency of evolving phosfine gas does however decrease by a higher Si-content.

Ferrosilicon in dry condition is non flammable. Fine dust of Ferrosilicon may in mix with air result in dust explosions. Wet material must not be charged into melting procedures.

4. First aid

Inhalation: Inhalation of phosfine gas can cause acute detoxication. Remove person from area to fresh air. Keep the person at rest and keep warm. Loosen tight-fitting clothes.

Contamination of eyes: Flush with plenty of water.

Contact with skin: Take off contaminated clothing and wash with plenty of water and soap.

5. Fire fighting measures

Do not use water. Extinguish with dry powder or sand. Let it burn itself out.

ИНН 7447010227, расчетный счет № 4070281057180000952
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кор. счет № 30101810400000000711 в РКЦ
ЦБ РФ г. Челябинска БИК 047501711
ОКОНХ 12150 ОКПО 00186507

RUSSIA, 454081, Chelyabinsk, ОАО "ЧЭМК"
Telephone: (3512) 72 63 10
Telefax: (3512) 72 63 73
Telex: 124126 "BELKA"

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6. Procedures for spills and leaks

Personal precautions: Wear work gloves.

Environmental precautions: Sweep up into a container. In case of Ferrosilicon being wet the container must not be sealed. To be kept in good ventilation.

7. Handling and storage

Store in dry area and in good ventilation. Wear work gloves when handling.

8. Exposure controls/Personal protection

Wear work gloves. Avoid ingestion and inhalation. Do not eat, drink or smoke during use. Wash hands before eating, drinking and smoking.

9. Physical and chemical properties

Melting point: -1412 degrees Celcius
Density at 20 degrees Celcius: 2,33 g/cm³
Boiling point: 2355 degrees Celcius

10. Stability and reactivity

-Store in dry area and in good ventilation. If repair works such as cutting, welding and the like should be done, accumulated dust must first be eliminated.
-Should be stored away from sources of ignition and heating and separated from other cargoes possessing chemical hazards.

11. Toxicological and ecological information

The material may evolve hydrogen, as well as phosphine and arsine which are high toxic gases. The rate of the gases evolution increases from broken surfaces, esp. during loading and discharging. Emission of gases intensifies if material is wet or when it reacts with water, vapours, alkalies and acids.

Dust formed during loading /unloading possesses low toxicity and moderate fibrogenetic properties.

12. Instruction for disposal

-Material should not be dropped from high above bottom plating in order to prevent crushing of the material and formation of fines which may evolve gases.
-Content of aerosol in the working area atmosphere should be periodically checked in accordance with procedure on determination of toxic substances.
-Ferrosilicon should be stored in such cargo spaces from which escaping highly toxic gases cannot reach living and service quarters, as well as public ventilation systems.

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13. Transport Information

Load transport:	Class 4,3	UN-Nr 1408
Sea transport:	Class 4,3 Appendix B	UN-Nr 1408

14. Obligatory legal information

Danger class:	-	IMO 4.3. Emergency schedule B2
Danger symbol:	-	N/A
Risk phrases:	-	N/A
Safety phrases:	-	N/A

15. Remaining information

-None

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