

3269

MATERIAL SAFETY DATA SHEET



FERRO

Date: January, 1990

TO THE PURCHASER: This MSDS contains important environmental, safety, and health information for your employees. Federal regulations require that this information be made available to them. If you resell this product, a copy of this MSDS should be given to the buyer.

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PRODUCT IDENTIFICATION: 3269 / 3269-2

(Common Name) Ferro frit 3269

CHEMICAL FAMILY: Frits; TSCA Inventory CAS # 65997-18-4\*

SYNONYM: Chemical substances manufactured in the production of frit

(From US-EPA/TSCA description) "Frit is a mixture of inorganic chemical substances produced by rapidly quenching a molten, complex combination of materials, confining the chemical substances thus manufactured as nonmigratory components of glassy solid flakes or granules. - - -"

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SECTION I

MANUFACTURERS NAME: Ferro Corporation, Frit Division

MAIL: 4150 East 56th Street  
P.O. Box 6550  
Cleveland, OH 44101

SHIP: 4150 East 56th Street  
Cleveland, OH 44105

TELEPHONE: For chemical emergency, call Chemtrec: 1-800-424-9300  
Ferro 24 Hour Informational number: (216) 641-5324  
Facility Informational number: (216) 641-8580

TELEX: 98-0165

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SECTION IIa - HAZARDOUS COMPONENTS

Frit is a fused silicate glass substance. The components of this glass product listed below are from the inventory of potentially hazardous substances referenced by FED/OSHA in 29 CFR 1910.1200.

| COMPONENT                                             | Exposure Limit (Air), mg/M <sup>3</sup> , 8 Hour TWA |              |              |
|-------------------------------------------------------|------------------------------------------------------|--------------|--------------|
|                                                       | ACGIH/TLV                                            | FED-OSHA/PEL | CAL-OSHA/PEL |
| Fluorides, as F                                       | 2.5                                                  | 2.5          | 2.5          |
| Particulates Not Otherwise Classified<br>(total dust) | 10.                                                  | 15.          | 10.          |

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SECTION IIb - "SARA III" DATA

This product contains the following component(s) that require reporting under Section 313 of the Emergency Planning and Community Right-to-Know Act, also known as Title III of SARA (the Superfund Amendments and Reauthorization Act), and 40 CFR Part 372:

COMPONENT

PERCENT PRESENT<sup>(a)</sup>

Zinc compounds

1.0% (as ZnO)

(a) The percent reported is based on the theoretical composition of this frit. While existing in theory, the component(s) mentioned are only present as part of FRIT (CAS # 65997-18-4\*).

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SECTION III - PHYSICAL HAZARD DATA

SPECIFIC GRAVITY (H<sub>2</sub>O = 1) approx. 2.41 MELTING POINT (°F) above 1200

SOLUBILITY IN WATER Negligible

APPEARANCE AND ODOR Frit flake, or milled glass powder / Odorless

Boiling Point / Vapor Pressure / Vapor Density / % Volatile By Volume / Evaporation Rate - - - All N/A

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SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT (method used): N/A FLAMMABLE LIMITS: N/A

EXTINGUISHING MEDIA: None required - not combustible

SPECIAL FIRE FIGHTING PROCEDURES: None UNUSUAL FIRE & EXPLOSION HAZARDS: None

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SECTION V - REACTIVITY DATA

STABILITY: Stable X Unstable N/A (Conditions To Avoid) N/A

INCOMPATIBILITY: (Materials To Avoid) N/A

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Avoid fumes from firing

HAZARDOUS POLYMERIZATION: Will Not Occur X (Conditions To Avoid) N/A

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(cont'd)

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SECTION VI - HEALTH HAZARD DATA

PRINCIPAL ROUTES OF ABSORPTION: Inhalation and Ingestion

EFFECTS OF OVEREXPOSURE: Metal fumes and/or fluoride containing vapors from firing may cause lung inflammation and injury in terms of hours with symptoms of chest pains, chills, cough, headache, and diarrhea.

Prolonged contact with frit dust can be very irritating to the eyes and/or skin. High dust levels can be irritating to the respiratory tract.

WITH adequate ventilation, dust control, and good personal hygiene, symptoms of overexposure should not occur. Advise regular medical monitoring of employees by a physician competent in industrial health.

CARCINOGENICITY: N/A

EMERGENCY AND FIRST AID PROCEDURES: If overexposure is suspected move employee to fresh air; if breathing is difficult give oxygen. Call a physician. For dust in eyes; flush immediately with clean water and call a physician.

SOURCE OF HEALTH HAZARD DATA: This MSDS was developed from information on the constituent substances of this fritted compound, not from test data on the frit itself.

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SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Uncontaminated material may be recovered and re-used. If contaminated scoop, vacuum, or wash into a receptacle for disposal.

WASTE DISPOSAL METHOD: Follow Federal or State and Local regulations for disposal.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Protect containers against physical damage; store in dry area away from feed and food products.

OTHER PRECAUTIONS: Employees should wash and change into clean clothes before going home.

