# MATERIAL S.FET DATA S.ET (FERRO

TO THE PURCHASER: This MSDS contains important environmental, safety, and lead to 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.

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. - - - "

### SECTION I

MANUFACTURERS NAME: Ferro Corporation, Frit Division

MAIL: 4150 East 56th Street

SHIP: 4150 East 56th Street

P.O. Box 6550

Cleveland, OH 44105

Cleveland, OH 44101

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

### 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.

Exposure Limit (Air), mg/M<sup>3</sup>, 8 Hour TWA

COMPONENT ACGIH/TLV FED-OSHA/PEL CAL-OSHA/PEL

Fluorides, as F 2.5 2.5

Particulates Not Otherwise Classified (total dust) 10. 15. 10.

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Section 313 of the Emergency Plan as Title III of SARA (the Superfur 40 CFR Part 372)	ng component(s) that require reporting under ning and Community Right-to-Know Act, also known and Amendments and Reauthorization Act), and
COMPONENT	PERCENT PRESENT (a)
Zinc compounds	1.0% (as ZnO)
(a) The percent reported is	based on the theoretical composition of this frit.
While existing in theory, the comFRIT (CAS # 65997-18-4*).	ponent(s) mentioned are only present as part of
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	II - PHYSICAL HAZARD DATA
SPECIFIC GRAVITY (H20 = 1) approx	. 2.41 MELTING POINT (°F) above 1200
SOLUBILITY IN WATER Neglig	ible AISO East 56th Street
APPEARANCE AND ODOR Frit_f	lake, or milled glass powder / Odorless _
Boiling Point / Vapor Pressure / Rate All N/A	Vapor Density / % Volatile By Volume / Evaporation
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SECTION IV - 1	FIRE & EXPLOSION HAZARD DATA
FLASH POINT (method used): _ N/A	FLAMMABLE LIMITS: _ N/A _
EXTINGUISHING MEDIA: None requ	uired - not combustible
SPECIAL FIRE FIGHTING PROCEDURES:	None _ UNUSUAL FIRE & EXPLOSION HAZARDS: _None _
	* * * * * * * * * * * * * * * * * * * *
SECTION	Y V - REACTIVITY DATA
STABILITY: Stable _X_ Unstable _1	
INCOMPATIBILITY: (Materials To A	void) N/A_
HAZARDOUS DECOMPOSITION OR BYPROD	UCTS: Avoid fumes from firing

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

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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. 

## 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.

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(COA)

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SECTION WE - HEALTH MAZAGE DATA

PRINCIPAL ROUTES OF ARSORPTION: Inhalation and Ingestion

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CARCINOGRATCHES: MIA

EMERCENCY AND FIRST AID PROCEDURES: If overexposure is suspected move employee to fresh eir, 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 DAIA: This MSBS was developed from information on the constituent substances of this fritted compound, not from test data on the frit isself.

SECTION WIL - PRECAUTIONS FOR SAFE HAMBLING AND USE

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

WASTE DISPOSAL METHOD: Follow Federal or State and Local regulations for disposal. PRECAUTIONS TO BE TAKEN IN HAMDLING AND STORING: Protect containers against physical damage; store in dry area away from feed and food products.

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

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