



## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Distributed by:  
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90-3110-2		3110-2 Glaze Frit	50 Lb Bags
Product specification	RS_FP_307428	Revision Date	04/14/2015
Version	1.0	Print Date	08/18/2015
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### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### Product identifier

Material number : 1024689

Trade name : 90-3110-2  
3110-2 Glaze Frit 50 Lb Bags

Substance name : frits, chemicals (group 1)

CAS-No. : 65997-18-4

EC-No. : 266-047-6

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Ceramic coating suited for firing, for glass and ceramics.

#### 1.3 Details of the supplier of the safety data sheet

Company : Ferro Corporation  
6060 Parkland Blvd. Suite 250  
44124-4185 Mayfield Heights

Telephone : +12168755600

Telefax :

E-mail address : SDSNA@ferro.com

Responsible/issuing person

#### 1.4 Emergency telephone number

CHEMTREC Global Number : +(1)-703-527-3887(Call Collect)

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

##### Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.  
This document has been developed with the exclusive purpose of complying with the obligation of informing the supply chain according to article 32 of the Reach regulation, because this material is not classified and does not require a material safety data sheet.

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## 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

## 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Chemical nature : glass/frit

### Hazardous components

No hazardous ingredients

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

- General advice : Do not leave the victim unattended.
- If inhaled : If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : Take off contaminated clothing and shoes immediately.  
Wash off with soap and plenty of water.
- In case of eye contact : Flush eyes with water as a precaution.  
Remove contact lenses.  
Protect unharmed eye.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.  
Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : None known.

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Risks : None known.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : None known.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : High volume water jet

### 5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : No hazardous combustion products are known

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Standard procedure for chemical fires.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.  
Ensure adequate ventilation.  
Evacuate personnel to safe areas.

### 6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Pick up and arrange disposal without creating dust.  
Sweep up and shovel.  
Keep in suitable, closed containers for disposal.

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#### 6.4 Reference to other sections

For personal protection see section 8.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

- Advice on safe handling : For personal protection see section 8.  
No special handling advice required.  
Smoking, eating and drinking should be prohibited in the application area.
- Advice on protection against fire and explosion : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.
- Hygiene measures : General industrial hygiene practice.

### 7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.
- Advice on common storage : No special restrictions on storage with other products.  
No materials to be especially mentioned.
- Other data : Keep in a dry place. No decomposition if stored and applied as directed.

### 7.3 Specific end use(s)

- Specific use(s) : Consult the technical guidelines for the use of this substance/mixture.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

#### Personal protective equipment

- Eye protection : Safety glasses
- Hand protection  
Remarks : For prolonged or repeated contact use protective gloves.
- Skin and body protection : Protective suit

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Respiratory protection : No personal respiratory protective equipment normally required.

Protective measures : Wear suitable protective equipment.  
When using do not eat, drink or smoke.

#### Environmental exposure controls

General advice : No special environmental precautions required.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	: powder
Colour	: white
Odour	: odourless
Odour Threshold	: No data available
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: Not applicable
Evaporation rate	: Not applicable
Flammability (solid, gas)	: No data available
Burning rate	: No data available
Auto-ignition temperature	: Not applicable
Vapour pressure	: No data available
Relative density	: No data available
Bulk density	: No data available
Solubility(ies)	
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Thermal decomposition	: No data available

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Viscosity  
 Viscosity, dynamic : No data available  
 Viscosity, kinematic : No data available  
 Explosive properties : No data available

## 9.2 Other information

Refractive index : Not applicable

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable under recommended storage conditions.  
 No decomposition if stored and applied as directed.

### 10.2 Chemical stability

No decomposition if stored and applied as directed.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : No hazards to be specially mentioned.

### 10.4 Conditions to avoid

Conditions to avoid : No data available

### 10.5 Incompatible materials

Materials to avoid : No data available

No data available

### 10.6 Hazardous decomposition products

Hazardous decomposition products : Stable under normal conditions.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

Not classified based on available information.

#### Product:

Acute oral toxicity : Remarks: No data available

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Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

#### **Skin corrosion/irritation**

Not classified based on available information.

##### **Product:**

Remarks: According to the classification criteria of the European Union, the product is not considered as being a skin irritant.

#### **Serious eye damage/eye irritation**

Not classified based on available information.

##### **Product:**

Remarks: According to the classification criteria of the European Union, the product is not considered as being an eye irritant.

#### **Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

##### **Product:**

Remarks: No data available

#### **Germ cell mutagenicity**

Not classified based on available information.

#### **Carcinogenicity**

Not classified based on available information.

#### **Reproductive toxicity**

Not classified based on available information.

#### **STOT - single exposure**

Not classified based on available information.

#### **STOT - repeated exposure**

Not classified based on available information.

#### **Aspiration toxicity**

Not classified based on available information.

#### **Further information**

##### **Product:**

Remarks: No data available

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## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

**Product:**

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

### 12.2 Persistence and degradability

**Product:**

Biodegradability : Remarks: No data available

### 12.3 Bioaccumulative potential

**Product:**

Bioaccumulation : Remarks: No data available

### 12.4 Mobility in soil

**Product:**

Distribution among environmental compartments : Remarks: No data available

### 12.5 Results of PBT and vPvB assessment

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

### 12.6 Other adverse effects

**Product:**

Additional ecological information : Remarks: No data available  
There is no data available for this product.

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## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods



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Product : Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty remaining contents.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.

## SECTION 14: TRANSPORT INFORMATION

### 14.1 UN number

Not regulated as a dangerous good

### 14.2 UN proper shipping name

Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

### 14.4 Packing group

Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Remarks :  
Not classified as dangerous in the meaning of transport regulations.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Ship type : N/A

Pollution category : N/A

## SECTION 15: REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors : Neither banned nor restricted

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Neither banned nor restricted

Regulation (EC) No 689/2008 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Neither banned nor restricted

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- REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).
- EU. REACH - Annex XIV: List of substances subject to authorisation : Neither banned nor restricted
- Regulation (EC) No 1005/2009 on substances that deplete the ozone layer - Annex I Controlled substances covered : Neither banned nor restricted
- Regulation (EC) No 850/2004 on persistent organic pollutants : Neither banned nor restricted
- Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances  
Not applicable
- Other regulations : Available studies conclude that this substance does not require classification nor labeling according to Regulation (EC) No 1272/2008 and thus is exempted from registration according to Annex V of Regulation (EC) No 1907/2006.

**The components of this product are reported in the following inventories:**

- REACH : On the inventory, or in compliance with the inventory
- CH INV : On the inventory, or in compliance with the inventory
- TSCA : On TSCA Inventory
- DSL : All components of this product are on the Canadian DSL.
- AICS : On the inventory, or in compliance with the inventory
- NZIoC : Not in compliance with the inventory
- ENCS : On the inventory, or in compliance with the inventory
- ISHL : Not in compliance with the inventory
- KECI : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory
- TW INV : Not in compliance with the inventory
- MY INV : Not in compliance with the inventory

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TR INV : Not in compliance with the inventory

### Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA), CH INV (Switzerland), MY INV (Malaysia), TR INV (Turkey), TW INV (Taiwan)

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

## SECTION 16: OTHER INFORMATION

### Further information

Sources of key data used to compile the Safety Data Sheet : [1] Estudio de Evaluación de Riesgos de la Fritas Cerámicas, Universitat Jaume I, 2005  
 [2] Modelling Study of Ceramic Frits Formulation for their Classification in REACH, Universtat Jaume I, 2009  
 [3] 2009 Validity Assesment of the Exemption Dossier Ceramic Frits, RCC Ltd, Switzerland, 2007, Harlan Laboratories Ltd, 2009

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



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