

1130102		3269-2 Glaze Frit, Leadless	50 Lb bag
Product specification	RS_FP_600391	Revision Date	07/07/2015
Version	1	Print Date	03/15/2016
Material number	1130102	Page	Page 1 of 9

SECTION 1. IDENTIFICATION

Product name : 3269-2 Glaze Frit, Leadless 50 Lb bag
000000000001130102

Product code : RS_FP_600391

Manufacturer or supplier's details

Company name of supplier : Ferro Corporation

Address : 6060 Parkland Blvd. Suite 250
Mayfield Heights OH 44124-4185

Telephone : (216) 875-5600

Disposal considerations : Dispose of wastes in an approved waste disposal facility.

Emergency telephone number

CHEMTREC In-Country : (800)424-9300

Number

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

Recommended use of the chemical and restrictions on use

Recommended use : Industrial use
Industrial use

Restrictions on use : Reserved for industrial and professional use.
Reserved for industrial and professional use.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

General advice : Consult a physician.

If inhaled : Remove to fresh air.

1130102		3269-2 Glaze Frit, Leadless	50 Lb bag
Product specification	RS_FP_600391	Revision Date	07/07/2015
Version	1	Print Date	03/15/2016
Material number	1130102	Page	Page 2 of 9

	<p>If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person.</p> <p>Remove to fresh air. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person.</p>
In case of skin contact	<p>: Wash off immediately with soap and plenty of water. If a person feels unwell or symptoms of skin irritation appear, consult a physician.</p> <p>Wash off immediately with soap and plenty of water. If a person feels unwell or symptoms of skin irritation appear, consult a physician.</p>
In case of eye contact	<p>: Rinse immediately with plenty of water and seek medical advice.</p> <p>Rinse immediately with plenty of water and seek medical advice.</p>
If swallowed	<p>: Do NOT induce vomiting. Rinse immediately with plenty of water and seek medical advice.</p> <p>Do NOT induce vomiting. Rinse immediately with plenty of water and seek medical advice.</p>

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	<p>: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.</p> <p>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.</p>
Unsuitable extinguishing media	<p>: Do not use a solid water stream as it may scatter and spread fire.</p> <p>Do not use a solid water stream as it may scatter and spread fire.</p>
Specific hazards during firefighting	<p>: Exposure to decomposition products may be a hazard to health. Do not allow run-off from fire fighting to enter drains or water courses.</p> <p>Exposure to decomposition products may be a hazard to health. Do not allow run-off from fire fighting to enter drains or water courses.</p>

1130102		3269-2 Glaze Frit, Leadless	50 Lb bag
Product specification	RS_FP_600391	Revision Date	07/07/2015
Version	1	Print Date	03/15/2016
Material number	1130102	Page	Page 3 of 9

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

In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Follow safe handling advice and personal protective equipment recommendations.
- Environmental precautions : Ensure adequate ventilation. Follow safe handling advice and personal protective equipment recommendations.
- Environmental precautions : Do not flush into surface water or sanitary sewer system. Prevent product from entering drains.
- Environmental precautions : Do not flush into surface water or sanitary sewer system. Prevent product from entering drains.
- Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal. Clean contaminated floors and objects thoroughly while observing environmental regulations.
- Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal. Clean contaminated floors and objects thoroughly while observing environmental regulations.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not get in eyes or mouth or on skin. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Do not use in areas without adequate ventilation. Keep away from heat and sources of ignition.
- Advice on safe handling : Do not get in eyes or mouth or on skin. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Do not use in areas without adequate ventilation. Keep away from heat and sources of ignition.
- Conditions for safe storage : Keep in a dry, cool and well-ventilated place.
- Conditions for safe storage : Keep in a dry, cool and well-ventilated place.

1130102		3269-2 Glaze Frit, Leadless	50 Lb bag
Product specification	RS_FP_600391	Revision Date	07/07/2015
Version	1	Print Date	03/15/2016
Material number	1130102	Page	Page 4 of 9

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Apply technical measures to comply with the occupational exposure limits.
Provide adequate ventilation.
Apply technical measures to comply with the occupational exposure limits.
Provide adequate ventilation.

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection

Material : Protective gloves
Protective gloves

Eye protection

: Safety glasses with side-shields
Ensure that eyewash stations and safety showers are close to the workstation location.
Safety glasses with side-shields
Ensure that eyewash stations and safety showers are close to the workstation location.

Protective measures

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

Hygiene measures

: Remove contaminated clothing and protective equipment before entering eating areas.
Wash hands before breaks and immediately after handling the product.
Remove contaminated clothing and protective equipment before entering eating areas.
Wash hands before breaks and immediately after handling the product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Colour : coloured

Odour : characteristic

Odour Threshold : No data available

SAFETY DATA SHEET



1130102		3269-2 Glaze Frit, Leadless	50 Lb bag
Product specification	RS_FP_600391	Revision Date	07/07/2015
Version	1	Print Date	03/15/2016
Material number	1130102	Page	Page 5 of 9

	No data available
pH	: No data available
Melting point/range	: No data available
	No data available
Boiling point/boiling range	: No data available
	No data available
Flash point	: Not applicable
Evaporation rate	: Not applicable
Upper explosion limit	: No data available
	No data available
Lower explosion limit	: No data available
	No data available
Vapour pressure	: No data available
	No data available
Relative vapour density	: No data available
	No data available
Relative density	: No data available
	No data available
Bulk density	: No data available
Solubility(ies)	
Water solubility	: No data available
	No data available
Partition coefficient: n-octanol/water	: No data available
	No data available
Auto-ignition temperature	: not determined
	not determined
Thermal decomposition	: No data available
	No data available

1130102		3269-2 Glaze Frit, Leadless	50 Lb bag
Product specification	RS_FP_600391	Revision Date	07/07/2015
Version	1	Print Date	03/15/2016
Material number	1130102	Page	Page 6 of 9

Viscosity
Viscosity, kinematic : No data available
No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No data available
No data available

Chemical stability : No data available
No data available

Possibility of hazardous reactions : No data available
No data available

Conditions to avoid : Incompatible materials
Incompatible materials

Incompatible materials : Incompatible with oxidizing agents.
Incompatible with strong acids and bases.
Incompatible with oxidizing agents.
Incompatible with strong acids and bases.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

inhalation (dust/mist/fume)

inhalation (vapour)

Skin

Eye contact

Ingestion

inhalation (dust/mist/fume)

inhalation (vapour)

Skin

Eye contact

Ingestion

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

1130102		3269-2 Glaze Frit, Leadless	50 Lb bag
Product specification	RS_FP_600391	Revision Date	07/07/2015
Version	1	Print Date	03/15/2016
Material number	1130102	Page	Page 7 of 9

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

1130102		3269-2 Glaze Frit, Leadless	50 Lb bag
Product specification	RS_FP_600391	Revision Date	07/07/2015
Version	1	Print Date	03/15/2016
Material number	1130102	Page	Page 8 of 9

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Dispose of wastes in an approved waste disposal facility.

SECTION 14. TRANSPORT INFORMATION

International Regulation

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

National Regulations

49 CFR DOT

Not regulated as a hazardous material

SECTION 15. REGULATORY INFORMATION

TSCA list : TSCA 5a - Not relevant
TSCA_12b - Not relevant

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

frits, chemicals (group 2) 65997-18-4

New Jersey Right To Know

frits, chemicals (group 2) 65997-18-4

California Prop 65 This product does not contain any chemicals known to State

1130102		3269-2 Glaze Frit, Leadless	50 Lb bag
Product specification	RS_FP_600391	Revision Date	07/07/2015
Version	1	Print Date	03/15/2016
Material number	1130102	Page	Page 9 of 9

of California to cause cancer, birth defects, or any other reproductive harm.

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
	: frits, chemicals (group 2)
ENCS	: On the inventory, or in compliance with the inventory
ISHL	: Not in compliance with the inventory
	: frits, chemicals (group 2)
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

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)

SECTION 16. OTHER INFORMATION

Revision Date : 07/07/2015

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.