

SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

1024690		3124-2 Glaze Frit	50 Lb bag
Product specification	RS_FP_604390	Revision Date	01/17/2017
Version	2.1	Print Date	05/03/2017
Material number	1024690	Page	Page 1 of 9

SECTION 1. IDENTIFICATION

Product name : **1024690**
3124-2 Glaze Frit 50 Lb bag

Material number : **1024690**

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

Emergency telephone number

In-Country Number : (800)424-9300

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

Recommended use of the chemical and restrictions on use

Recommended use : Manufacture of ceramic coatings and decorating preparations suited for firing, for glass and ceramics.
Frit for industrial 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

Substance / Mixture : Substance

Chemical nature : glass/frit

Hazardous components

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

1024690		3124-2 Glaze Frit	50 Lb bag
Product specification	RS_FP_604390	Revision Date	01/17/2017
Version	2.1	Print Date	05/03/2017
Material number	1024690	Page	Page 2 of 9

-
- General advice : Consult a physician.
- If inhaled : Move to fresh air.
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.
- In case of eye contact : Rinse immediately with plenty of water and seek medical advice.
- If swallowed : If accidentally swallowed obtain immediate medical attention.
- Most important symptoms and effects, both acute and delayed : None known.
-

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Specific hazards during firefighting : Do not use a solid water stream as it may scatter and spread fire.
Cool closed containers exposed to fire with water spray.
- Hazardous combustion products : No hazardous combustion products are known
- Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
-

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
No conditions to be specially mentioned.
- Environmental precautions : No special environmental precautions required.
- Methods and materials for containment and cleaning up : Clean up promptly by sweeping or vacuum.
Keep in suitable, closed containers for disposal.
Clean contaminated floors and objects thoroughly while observing environmental regulations.

SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

1024690		3124-2 Glaze Frit	50 Lb bag
Product specification	RS_FP_604390	Revision Date	01/17/2017
Version	2.1	Print Date	05/03/2017
Material number	1024690	Page	Page 3 of 9

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
- Materials to avoid : No special restrictions on storage with other products.
No materials to be especially mentioned.

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.

Personal protective equipment

- Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Hand protection : For prolonged or repeated contact use protective gloves.
- Eye protection : Safety glasses
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 : Wash hands before breaks and immediately after handling the product.
Remove contaminated clothing and protective equipment before entering eating areas.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : flakes
- Colour : white
- Odour : odourless
- Odour Threshold : No data available

SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

1024690		3124-2 Glaze Frit	50 Lb bag
Product specification	RS_FP_604390	Revision Date	01/17/2017
Version	2.1	Print Date	05/03/2017
Material number	1024690	Page	Page 4 of 9

pH	: Not applicable
Melting point/range	: > 1,000 °C
Boiling point/boiling range	: Not applicable
Flash point	: Not applicable
Flammability (solid, gas)	: The product is not flammable.
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapour pressure	: Not applicable
Relative vapour density	: Not applicable
Relative density	: No data available
Density	: No data available
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: Not applicable
Decomposition temperature	: Not applicable
Viscosity	
Viscosity, kinematic	: Not applicable
Explosive properties	: Not applicable
Oxidizing properties	: Not applicable
Refractive index	: Not applicable
Volatile organic compounds (VOC) content	: Not applicable

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCOMI Intermediate or Final VOC's (40 CFR 60.489).
This product does not contain any VOC exemptions listed under the U.S. Clean Air Act Section 450.

SECTION 10. STABILITY AND REACTIVITY

SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

1024690		3124-2 Glaze Frit	50 Lb bag
Product specification	RS_FP_604390	Revision Date	01/17/2017
Version	2.1	Print Date	05/03/2017
Material number	1024690	Page	Page 5 of 9

Reactivity	:	Stable under recommended storage conditions.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	No data available
Incompatible materials	:	None.
Hazardous decomposition products	:	Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

inhalation (dust/mist/fume)

Skin

Eye contact

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.

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.

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.

SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

1024690		3124-2 Glaze Frit	50 Lb bag
Product specification	RS_FP_604390	Revision Date	01/17/2017
Version	2.1	Print Date	05/03/2017
Material number	1024690	Page	Page 6 of 9

Reproductive toxicity

Not classified based on available information.

STOT Specific Target Organ Toxicity - single exposure

Not classified based on available information.

STOT Specific Target Organ Toxicity - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

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

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

Persistence and degradability

Product:

Biodegradability : Remarks: Not applicable

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Does not accumulate in organisms.

Mobility in soil

Product:

Distribution among environmental compartments : Remarks: Not applicable

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

1024690		3124-2 Glaze Frit	50 Lb bag
Product specification	RS_FP_604390	Revision Date	01/17/2017
Version	2.1	Print Date	05/03/2017
Material number	1024690	Page	Page 7 of 9

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

- Waste from residues : Dispose of wastes in an approved waste disposal facility.
- Contaminated packaging : Empty remaining contents.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

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

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

TSCA list : TSCA 5a - Not relevant

TSCA list : TSCA_12b - Not relevant

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

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.

SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

1024690		3124-2 Glaze Frit	50 Lb bag
Product specification	RS_FP_604390	Revision Date	01/17/2017
Version	2.1	Print Date	05/03/2017
Material number	1024690	Page	Page 8 of 9

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.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCOMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know

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

Pennsylvania Right To Know

This product contains components that are reportable under the regulation.

New Jersey Right To Know

This product contains components that are reportable under the regulation.

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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

EINECS (European Union) : On the inventory, or in compliance with the inventory

SWISS (Switzerland) : On the inventory, or in compliance with the inventory

TSCA (United States) : On TSCA Inventory

DSL/NDSL (Canada) : All components of this product are on the Canadian DSL.

AICS (Australia) : On the inventory, or in compliance with the inventory

ENCS (Japan) : On the inventory, or in compliance with the inventory

SAFETY DATA SHEET



According to OSHA Hazard Communication Standard 29CFR 1910.1200 (HCS 2012)

1024690		3124-2 Glaze Frit	50 Lb bag
Product specification	RS_FP_604390	Revision Date	01/17/2017
Version	2.1	Print Date	05/03/2017
Material number	1024690	Page	Page 9 of 9

ISHL (Japan)	: Not in compliance with the inventory
KECI (Korea)	: On the inventory, or in compliance with the inventory
PICCS (Philippines)	: On the inventory, or in compliance with the inventory
IECSC (China)	: On the inventory, or in compliance with the inventory
TCSI (Taiwan)	: On the inventory, or in compliance with the inventory
CICR (Turkey)	: On the inventory, or in compliance with the inventory
INSQ (Mexico)	: On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

Revision Date : 01/17/2017

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.

US / EN