

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

90-3110-2 3110-2 Glaze Frit 50 Lb Bags

 Product specification
 RS_FP_307428
 Revision Date
 08/26/2018

 Version
 1.6
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SECTION 1. IDENTIFICATION

Product name : **90-3110-2**

3110-2 Glaze Frit 50 Lb Bags

Material number : 1024689

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 : Consult the technical guidelines for the use of this

substance/mixture.

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

General advice : Consult a physician. If inhaled : Remove to fresh air.

If unconscious place in recovery position and seek medical

advice.

Never give anything by mouth to an unconscious person.

In case of skin contact : Wash off immediately with soap and plenty of water.

If a person feels unwell or symptoms of skin irritation appear,

consult a physician.



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In case of eye contact : Rinse immediately with plenty of water and seek medical

advice.

If swallowed : Do NOT induce vomiting.

Rinse immediately with plenty of water and seek medical

advice.

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.

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

Materials to avoid

: Keep in a dry, cool and well-ventilated place.

No special restrictions on storage with other products.

No materials to be especially mentioned.



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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

Material : 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 : powder Colour : white Odour : odourless

Odour Threshold : No data available

pH : No data available
Melting point/range : No data available
Boiling point/boiling range : No data available
Flash point : Not applicable
Evaporation rate : Not applicable

Burning rate : No data available Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available Relative vapour density : No data available

Relative density : No data available

Density : No data available



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Bulk density : No data available

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

Auto-ignition temperature Decomposition temperature

Viscosity

Viscosity, dynamic

Viscosity, kinematic

Explosive properties Oxidizing properties Refractive index

Volatile organic compounds

(VOC) content

: No data available

: Not determined

No data available

: No data available No data available

No data available No data available

Not applicable

: 0%

This product does not contain any chemicals listed under the

U.S. Clean Air Act Section 111 SOCMI 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

Reactivity Stable under recommended storage conditions. Chemical stability

Possibility of hazardous

reactions

No decomposition if stored and applied as directed.

No dangerous reaction known under conditions of normal use.

No decomposition if stored and applied as directed.

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.

Product:

: Remarks: No data available Acute oral toxicity



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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.

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.

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.



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

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data available

Mobility in soil

Product:

Distribution among : Remarks: No data available

environmental compartments

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).

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

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



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49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

TSCA list : TSCA_12b - Not relevant

TSCA list : TSCA 5a - 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.

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 SOCMI 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



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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

NZioC (New Zealand) : On the inventory, or in compliance with the inventory

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

ISHL (Japan) : On the inventory, or 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

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 Assessement of the Exemption Dossier Cera

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