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

1133418		3292-2 Glaze Frit	BAG50LB
Product specification	RS_FP_307428	Revision Date	02/16/2023
Version	2.1	Print Date	02/17/2023
Material number	1133418	Page	Page 1 of 11

SECTION 1. IDENTIFICATION

Product name Product code	:	1133418 3292-2 Glaze Frit 1133418	BAG50LB
Manufacturer or supplier's	deta	ails	
Company name of supplier	:	Vibrantz Corporation	
Address	:	: 6060 Parkland Blvd. Suite 250 Mayfield Heights OH 44124-4185	
Telephone	:	: (216) 875-5600	
Emergency telephone number In-Country Number : CHEMTREC Global Number :		(800)424-9300 +(1)-703-527-3887 (Call Collect)	
Recommended use of the cl	hen	nical and restrictions on u	ISE
Recommended use	:	Industrial use	
Restrictions on use	:	Reserved for industrial and	d professional use.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Substance

Chemical nature : glass/frit

Components

No hazardous ingredients

SECTION 4. FIRST AID MEASURES

General advice

: Do not leave the victim unattended.

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

Version 2	S_FP_307428 1 133418	3292-2 Glaze Frit Revision Date Print Date Page	BAG50LB 02/16/2023 02/17/2023 Page 2 of 11
If inhaled		unconscious, place in recovery p lvice.	osition and seek medical
In case of skin contact	re	ash off immediately with soap an moving all contaminated clothes skin irritation persists, call a phys	and shoes.
In case of eye contact	R P K	ush eyes with water as a precaut emove contact lenses. rotect unharmed eye. eep eye wide open while rinsing. eye irritation persists, consult a s	
If swallowed	K D N	duce vomiting immediately and c eep respiratory tract clear. o not give milk or alcoholic bever ever give anything by mouth to a symptoms persist, call a physicia	ages. n unconscious person.
Most important sympto and effects, both acute delayed	-	one known.	
Notes to physician	: T	eat symptomatically.	

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment.
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire- fighting	:	Do not use a solid water stream as it may scatter and spread fire.
Hazardous combustion prod- ucts	:	No hazardous combustion products are known
Further information	:	Standard procedure for chemical fires.
Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Avoid dust formation. Avoid breathing dust.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so.

(1103 2012)						
1133418 Product specification Version Material number	RS_FP_30 2.1 1133418	074	28	3292-2 Glaze Frit Revision Date Print Date Page	BAG50LB 02/16/2023 02/17/2023 Page 3 of 11	
			If the produc respective a		and lakes or drains info	orm
Methods and mate containment and c		:	serving envi	minated floors and ob ronmental regulations able, closed container		ob-
SECTION 7. HANDLIN	IG AND STO	DR/	AGE			
Advice on protection fire and explosion	on against	:	Provide app is formed.	ropriate exhaust venti	ilation at places where	dust
Advice on safe ha	ndling	:	Smoking, ea plication are	a.	on 8. uld be prohibited in the nce with local and natic	•
Conditions for safe	e storage	:	place. Electrical ins	0,	dry and well-ventilated naterials must comply w s.	
Materials to avoid		:		estrictions on storage to be especially mer		
Further informatior age stability	n on stor-	:	Keep in a dr No decompo	y place. osition if stored and ap	oplied as directed.	

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

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures	:	Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Respiratory protection	: General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are un- known, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazard- ous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

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

(1103 2012)				
1133418			3292-2 Glaze Frit	BAG50LB
Product specification Version Material number	RS_FP_307 2.1 1133418	428	Revision Date Print Date Page	02/16/2023 02/17/2023 Page 4 of 11
Hand protection	:	nitrile-butyl- mm and Bre for a specific ducers of th	eak Through time: > 480	ar; Glove thickness: > 0.4 0 minutes. The suitability discussed with the pro-
Eye protection	:	to the works	eyewash stations and stations location. Station location. Stafety goggles	safety showers are close
Skin and body prote	ection :	Protective s	uit	
Protective measure	s :	Wear suitab	le protective equipmen	t.
Hygiene measures	:	Remove cor before enter	ring eating areas.	the end of workday. d protective equipment dustrial hygiene and safety

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	powder
Colour	:	white
Odour	:	odourless
Odour Threshold	:	No data available
рН	:	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
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available

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

(HCS 2012) 1133418 Product specification Version Material number	RS_FP_30 2.1 1133418	0742	3292-2 Glaze Frit Revision Date Print Date Page	BAG50LB 02/16/2023 02/17/2023 Page 5 of 11
Lower explosion lin flammability limit	nit / Lower	:	No data available	
Vapour pressure		:	No data available	
Relative vapour de	nsity	:	No data available	
Relative density		:	No data available	
Density		:	No data available	
Bulk density		:	No data available	
Solubility(ies) Water solubility		:	insoluble	
Solubility in othe	er solvents	:	No data available	
Partition coefficient octanol/water	:: n-	:	No data available	
Auto-ignition tempe	erature	:	not determined	
Decomposition terr	perature	:	No data available	
Viscosity Viscosity, dynar	nic	:	No data available	
Viscosity, kinem	natic	:	No data available	
Explosive propertie Oxidizing propertie		:	No data available No data available	
Refractive index		:	Not applicable	
Volatile organic cor (VOC) content	npounds	:	0 %	
			This product does not contain any U.S. Clean Air Act Section 111 SO VOC's (40 CFR 60.489).	
			This product does not contain any under the U.S. Clean Air Act Section	

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

1133418		3292-2 Glaze Frit	BAG50LB
Product specification Version	RS_FP_307428 2.1	Revision Date Print Date	02/16/2023 02/17/2023
Material number	1133418	Page	Page 6 of 11

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reac- tions	:	No decomposition if stored and applied as directed. Dust may form explosive mixture in air.
Conditions to avoid	:	None, if used and stored as recommended.
Incompatible materials	:	Not applicable
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:

Acute oral toxicity

: Acute toxicity estimate: 2,500 mg/kg Method: Calculation method

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

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

1133418		3292-2 Glaze Frit	BAG50LB
Product specification	RS_FP_307428	Revision Date	02/16/2023
Version	2.1	Print Date	02/17/2023
Material number	1133418	Page	Page 7 of 11

on OSHA's list of regulated carcinogens.

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	
Product:	
Ozone-Depletion Potential :	Regulation: 40 CFR Protection of Environment; Part 82 Pro- tection of Stratospheric Ozone - CAA Section 602 Class I Substances Remarks: This product neither contains, nor was manufac-
	tured 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).
Additional ecological infor-	None known.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

mation

Waste from residues	: Send to a licensed waste management company.
	Dispose of wastes in an approved waste disposal facility.
	Do not dispose of waste into sewer.
	Do not contaminate ponds, waterways or ditches with chemi-
	cal or used container.

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

1133418		3292-2 Glaze Frit	BAG50LB
Product specification	RS_FP_307428	Revision Date	02/16/2023
Version	2.1	Print Date	02/17/2023
Material number	1133418	Page	Page 8 of 11

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

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

Special precautions for user

Remarks

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

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 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	: NO SARA Hazards
SARA 313	: This material does not contain any chemic

: 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).

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

1133418		3292-2 Glaze Frit	BAG50LB	
Product specification	RS_FP_307428	Revision Date	02/16/2023	
Version	2.1	Print Date	02/17/2023	
Material number	1133418	Page	Page 9 of 11	

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (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

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations

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.

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

New Jersey Right To Know

This product contains components that are reportable under the regulation.

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

TCSI (Taiwan)	:	On the inventory, or in compliance with the inventory
TSCA (United States)	:	All substances listed as active on the TSCA inventory
AIIC (Australia)	:	On the inventory, or in compliance with the inventory
DSL/NDSL (Canada)	:	All components of this product are on the Canadian DSL
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

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

1133418 Product specification Version Material number	RS_FP_307428 2.1 1133418	3292-2 Glaze Frit Revision Date Print Date Page	BAG50LB 02/16/2023 02/17/2023 Page 10 of 11
NZioC (New Zealan	d) : On the i	nventory, or in complianc	e with the inventory
SWISS (Switzerland	d) : On the i	nventory, or in complianc	e with the inventory
EINECS (European	Union) : On the i	nventory, or in complianc	e with the inventory
CICR (Turkey)	: On the i	nventory, or in complianc	e with the inventory
TECI (Thailand)	: On the i	nventory, or in complianc	e with the inventory

TSCA list

No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System: IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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

1133418		3292-2 Glaze Frit	BAG50LB
Product specification	RS_FP_307428	Revision Date	02/16/2023
Version	2.1	Print Date	02/17/2023
Material number	1133418	Page	Page 11 of 11

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

Revision Date : 02/16/2023

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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