SAFETY DATA SHEET

1. Identification

Product identifier **USG STRUCTO-CRETE® Brand Structural Panels**

Other means of identification

SDS number 14000030003

Synonyms USG STRUCTO-CRETE® Brand Structural Roof Deck Panels, USG STRUCTO-CRETE® Brand Structural Xtra Strength Panels, USG Structural Panel

Recommended use For interior and exterior applications.

Recommended restrictions Use in accordance with manufacturer's recommendations.

Manufacturer/Importer/Supplier/Distributor information

Company name United States Gypsum Company

Address 550 West Adams Street
Chicago, Illinois 60661-3637

Telephone 1-800-874-4968

Website www.usg.com

Emergency phone number 1-800-507-8899

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Sensitization, skin	Category 1
Carcinogenicity	Category 1A
Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. May cause cancer.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

Response If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Take off contaminated clothing and wash it before reuse.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1)	26499-65-0	> 50
Portland Cement	65997-15-1	< 25
Silica, fume	69012-64-2	< 15
Continuous filament glass fiber	65997-17-3	< 10
Trade secret	Proprietary	< 10

Impurities

Chemical name	Common name and synonyms	CAS number	%
Crystalline silica (Quartz)		14808-60-7	< 1

Composition comments All concentrations are in percent by weight.

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 1%. Exposures to respirable crystalline silica during the normal use of this product must be determined by workplace hygiene testing.

4. First-aid measures

Inhalation Dust irritates the respiratory system, and may cause coughing and difficulties in breathing. Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms persist.

Skin contact Contact with dust: Rinse area with plenty of water. Get medical attention if irritation develops and persists.

Eye contact Dust in eyes: Flush with cold tap water for at least 15 minutes. If irritation persists, seek medical attention immediately.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed Dust may cause skin, eye, throat and respiratory system irritation and cause coughing. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media Not applicable.

Specific hazards arising from the chemical Not a fire hazard.

Special protective equipment and precautions for firefighters Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods Cool material exposed to heat with water spray and remove it if no risk is involved.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up No specific clean-up procedure noted. For waste disposal, see Section 13 of the SDS.

Environmental precautions Avoid discharge to drains, sewers, and other water systems.

7. Handling and storage

Precautions for safe handling

Use work methods which minimize dust production. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Structural panels weigh between 140 to 150 pounds per panel and are designed to be carried and installed by two people. Because of the weight of these panels, it is important that they are always laid flat on the floor or flat over the framing, in a horizontal position. Prior to installation on the floor framing, panels may be placed on pallets or timbers. Panels may be placed on pallets or timbers spaced a maximum of 4’ on center with the end supports within 1’ of the ends of the panel.

Structural panels are cement based and are reinforced with glass fiber. Wear protective gloves to prevent any irritation to hands from the cement or glass fiber.

Cut panels with a carbide tipped circular saw equipped with a dry dust collection device or a dust wetting device to limit the amount of airborne dust. Dispose of the collected dust in a safe manner in compliance with local codes and regulations. When cutting panels always wear a NIOSH approved dust mask and wear safety glasses.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Protect from weather and prevent exposure to sustained moisture.

Panels must never be stored in an upright position, on their edges, leaning against a wall or other vertical support. If these panels tip over they could cause serious injury or death.

When placing pallets of material on a floor or floor frame it is imperative that the pallet be located over load bearing walls and framing that are capable of supporting the total load of a 20 piece pallet, which range between 3000 to 3100 pounds. Consult a qualified structural engineer or design professional, as required, for safe and proper distribution of pallets of panels over a floor frame and/or floor structure.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Impurities	Type	Value
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Portland Cement (CAS 65997-15-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Portland Cement (CAS 65997-15-1)	TWA	50 mppcf	
Silica, fume (CAS 69012-64-2)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		0.8 mg/m3	

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
		20 mppcf	
Trade secret	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.1 mg/m3	Respirable.
		2.4 mppcf	Respirable.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	10 mg/m3	Inhalable fraction.
Portland Cement (CAS 65997-15-1)	TWA	1 mg/m3	Respirable fraction.

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Continuous filament glass fiber (CAS 65997-17-3)	TWA	3 fibers/cm3	Fibrous dust.
		3 fibers/cm3	Fiber.
		5 mg/m3	fibers, total dust
		5 mg/m3	Fiber, total
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Portland Cement (CAS 65997-15-1)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Silica, fume (CAS 69012-64-2)	TWA	6 mg/m3	
Trade secret	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total

Impurities	Type	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Provide sufficient ventilation for operations causing dust formation. Observe occupational exposure limits and minimize the risk of exposure.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear approved safety goggles.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Skin protection	
Other	Wear long-sleeved shirts, pants and rubber boots.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure. Consult with respirator manufacturer to determine respirator selection, use, and limitations. Use positive pressure, air-supplied respirator for uncontrolled releases or when air purifying respirator limitations may be exceeded. Follow respirator protection program requirements (OSHA 1910.134 and ANSI Z88.2) for all respirator use.
Thermal hazards	None.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Board.
Color	Gray.
Odor	Low to no odor.
Odor threshold	Not applicable.
pH	10 - 12
Melting point/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	1.2 - 1.4 (H20 = 1)
Solubility(ies)	
Solubility (water)	Insoluble in water.
Partition coefficient (n-octanol/water)	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.
Other information	
Bulk density	72 - 88 lb/ft3
Explosive properties	Not explosive.
Flammability	Not applicable.
Oxidizing properties	Not oxidizing.
VOC	0 g/l

10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Calcium oxides. Sulfur oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation. Prolonged and repeated exposure to airborne respirable crystalline silica can cause silicosis and/or lung cancer.
Skin contact	Dust can be irritating to skin.
Eye contact	Causes serious eye damage.
Ingestion	Ingestion may cause irritation and stomach discomfort.
Symptoms related to the physical, chemical and toxicological characteristics	Dust may cause skin, eye, throat and respiratory system irritation and cause coughing.

Information on toxicological effects

Acute toxicity	Not expected to be acutely toxic.
Skin corrosion/irritation	Dust can cause skin irritation.
Serious eye damage/eye irritation	Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	Repeated and prolonged exposures to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Continuous filament glass fiber (CAS 65997-17-3)	3 Not classifiable as to carcinogenicity to humans.
Crystalline silica (Quartz) (CAS 14808-60-7)	1 Carcinogenic to humans.
Silica, fume (CAS 69012-64-2)	3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Crystalline silica (Quartz) (CAS 14808-60-7)	Known To Be Human Carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7)	Cancer

Reproductive toxicity	Not expected to be a reproductive hazard.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	Not classified. For detailed information, see section 16.
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Chronic effects	Prolonged and routine inhalation of high levels of respirable crystalline silica particles can lead to the lung disease known as silicosis. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica. Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure. Occupational exposure to respirable dust and respirable crystalline silica should be monitored and controlled. May cause eczema-like skin disorders (dermatitis).

12. Ecological information

Ecotoxicity	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	> 1970 mg/l, 96 hours

Persistence and degradability	No data available.
Bioaccumulative potential	Bioaccumulation is not expected.
Mobility in soil	No data available.
Other adverse effects	None expected.

13. Disposal considerations

Disposal instructions	Dispose in accordance with applicable federal, state, and local regulations. Recycle responsibly.
Local disposal regulations	Dispose of in accordance with local regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Crystalline silica (Quartz) (CAS 14808-60-7)	Cancer lung effects immune system effects kidney effects

Toxic Substances Control Act (TSCA) All components on the TSCA 8(b) inventory are designated "active" or are exempt from reporting under the Inventory Update Rule.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	Skin corrosion or irritation Serious eye damage or eye irritation Respiratory or skin sensitization Carcinogenicity Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. Massachusetts RTK - Substance List

Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)
Portland Cement (CAS 65997-15-1)
Silica, fume (CAS 69012-64-2)
Trade secret (CAS Proprietary)

US. New Jersey Worker and Community Right-to-Know Act

Continuous filament glass fiber (CAS 65997-17-3)
Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)
Portland Cement (CAS 65997-15-1)
Silica, fume (CAS 69012-64-2)
Trade secret (CAS Proprietary)

US. Pennsylvania Worker and Community Right-to-Know Law

Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)
Portland Cement (CAS 65997-15-1)
Silica, fume (CAS 69012-64-2)
Trade secret (CAS Proprietary)

US. Rhode Island RTK

Continuous filament glass fiber (CAS 65997-17-3)
Crystalline silica (Quartz) (CAS 14808-60-7)
Plaster of Paris (Calcium sulfate hemihydrate CAS 10034-76-1) (CAS 26499-65-0)
Portland Cement (CAS 65997-15-1)
Silica, fume (CAS 69012-64-2)

California Proposition 65

WARNING: This product can expose you to chemicals including Crystalline silica (Quartz), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Crystalline silica (Quartz) (CAS 14808-60-7) Listed: October 1, 1988

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Continuous filament glass fiber (CAS 65997-17-3)
Crystalline silica (Quartz) (CAS 14808-60-7)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 25-February-2022
Revision date -
Version # 01

Further information

Crystalline silica: Raw materials in this product contain respirable crystalline silica as an impurity. Exposures to respirable crystalline silica are not expected during the normal use of this product. However, actual levels must be determined by workplace hygiene testing. Prolonged and repeated exposure to airborne free respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer.

The International Agency for Research on Cancer (IARC) in June, 1987, categorized continuous filament glass fibers as not classifiable with respect to human carcinogenicity (Group 3). The evidence from human as well as animal studies was evaluated by IARC as insufficient to classify continuous filament glass fiber as a possible, probable, or confirmed cancer causing material.

The ACGIH has established a TLV (Threshold Limit Value or recommended exposure limit) for continuous filament glass fiber of 1 fiber per cubic centimeter of air for respirable fibers and 5 mg per cubic meter of air for inhalable glass fiber dust. These levels were established to prevent mechanical irritation of the upper airways. IARC, NTP (US National Toxicology Program) and OSHA (US Occupational Safety and Health Administration) do not list continuous filament glass fibers as a carcinogen.

As manufactured, continuous filament glass fibers in this product are not respirable. Continuous filament glass products that are chopped, crushed or severely mechanically processed during manufacturing or use may contain a very small amount of respirable particulate, some of which may be glass shards.

NFPA Ratings:
Health: 2
Flammability: 0
Physical hazard: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

NFPA ratings

Disclaimer

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.