

SAFETY DATA SHEET

1. Identification

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Product identifier	USG® Glacier™ Basic Acoustical Ceiling Panels
Other means of identification	
SDS number	41281160001
Additional Products:	Arctic, Cheyenne™, Frost™ Basic, Frost™, Frost™ High LR, Frost™ Basic Foil-Back, "F" Fissured™ Basic, Frost™ High NRC/High CAC, Renovations™, Sandrift™
Synonyms	Cast Mineral Fiber Ceiling Panels/Tiles
Recommended use	Interior use.
Recommended restrictions	Use in accordance with manufacturer's recommendations.
Manufacturer/Importer/Supplier/	Distributor information
Company name	USG Interiors, LLC
Address	550 West Adams Street
Telephone	Chicago, Illinois 60661-3637 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	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	None.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Get medical attention/advice if you feel unwell.
Storage	Store as indicated in Section 7.
Disposal	Dispose of in accordance with local, state, and federal regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	
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Not applicable.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	<mark>%</mark> > 65	
Slag wool fiber	N/A		
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	< 15	
Limestone	1317-65-3	< 5	

Composition comments	All concentrations are in percent by weight unless ingredient is a gas.
	Raw materials and/or coatings in this product contain small amounts of titanium dioxide, which has been classified as possibly carcinogenic to humans by the International Agency for Research on Cancer (IARC). However, per IARC "no significant exposure to primary particles of titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints" (1). See Section 16 for further information.
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 or persists.
Eye contact	Dust in the eyes: Do not rub eyes. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Under normal conditions of intended use, this material does not pose a risk to health. Dust may irritate throat and respiratory system and cause coughing.
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 meas	sures
Personal precautions, protective equipment and emergency procedures	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. Avoid inhalation of dust and contact with skin and eyes. Wear appropriate personal protective equipment. Wash hands after handling. Observe good industrial hygiene practices.
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Store away from incompatible materials.

Conditions for safe storage, including any incompatibilities

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

Components	Туре	Value	Form
Slag wool fiber (CAS N/A)	TWA	5 mg/m3	Fiber, respirable (diameter ≤ 3.5 µm and length ≥ 10 µm)
		15 mg/m3	Fiber, total
US. OSHA Table Z-1 Limits	for Air Contaminants (29 CFR 1910.1	000)	
Components	Туре	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
10001 24 0)		15 mg/m3	Total dust.
Limestone (CAS 1317-65-3)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
US. ACGIH Threshold Limit	Values		
Components	Туре	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Slag wool fiber (CAS N/A)	TWA	1 fibers/cm3	Fiber, respirable (length 5 µm and aspect ratio ≥ 3:1)
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US. NIOSH: Pocket Guide to	Chemical Hazards		
US. NIOSH: Pocket Guide to Components	o Chemical Hazards Type	Value	Form
		5 mg/m3	Form Respirable.
Components Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	Type TWA	5 mg/m3 10 mg/m3	Form Respirable. Total
Components Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS	Туре	5 mg/m3 10 mg/m3 5 mg/m3	Form Respirable. Total Respirable.
Components Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5) Limestone (CAS 1317-65-3)	Type TWA TWA	5 mg/m3 10 mg/m3 5 mg/m3 10 mg/m3	Form Respirable. Total Respirable. Total
Components Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	Type TWA	5 mg/m3 10 mg/m3 5 mg/m3	Form Respirable. Total Respirable.
Components Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5) Limestone (CAS 1317-65-3)	Type TWA TWA	5 mg/m3 10 mg/m3 5 mg/m3 10 mg/m3	Form Respirable. Total Respirable. Total Fiber, respirable (diameter ≤ 3.5 µm and
Components Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5) Limestone (CAS 1317-65-3)	Type TWA TWA	5 mg/m3 10 mg/m3 5 mg/m3 10 mg/m3 3 fibers/cm3 5 mg/m3	Form Respirable. Total Respirable. Total Fiber, respirable (diameter ≤ 3.5 μm and length ≥ 10 μm)
Components Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5) Limestone (CAS 1317-65-3) Slag wool fiber (CAS N/A)	Type TWA TWA TWA	5 mg/m3 10 mg/m3 5 mg/m3 10 mg/m3 3 fibers/cm3 5 mg/m3 r the ingredient(s). tions causing dust formation. C	Form Respirable. Total Respirable. Total Fiber, respirable (diameter $\leq 3.5 \ \mu m$ and length $\geq 10 \ \mu m$) Fiber, total
Components Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5) Limestone (CAS 1317-65-3) Slag wool fiber (CAS N/A) ogical limit values ropriate engineering	Type TWA TWA TWA No biological exposure limits noted fo Provide sufficient ventilation for opera	5 mg/m3 10 mg/m3 5 mg/m3 10 mg/m3 3 fibers/cm3 5 mg/m3 r the ingredient(s). tions causing dust formation. C of exposure. d saw to minimize dust levels. I such as power cutting, power ke	Form Respirable. Total Respirable. Total Fiber, respirable (diameter $\leq 3.5 \ \mu m$ and length $\geq 10 \ \mu m$) Fiber, total Observe occupational f a router is used it must have
Components Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5) Limestone (CAS 1317-65-3) Slag wool fiber (CAS N/A) ogical limit values ropriate engineering trols	TWA TWA TWA TWA No biological exposure limits noted for Provide sufficient ventilation for opera exposure limits and minimize the risk Cut and trim with a utility knife or han a dust collection system. Operations	5 mg/m3 10 mg/m3 5 mg/m3 10 mg/m3 3 fibers/cm3 5 mg/m3 r the ingredient(s). tions causing dust formation. C of exposure. d saw to minimize dust levels. I such as power cutting, power ke I (2). See Section 16 for further	Form Respirable. Total Respirable. Total Fiber, respirable (diameter $\leq 3.5 \ \mu m$ and length $\geq 10 \ \mu m$) Fiber, total Observe occupational f a router is used it must hav erfing or using compressed a
Components Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5) Limestone (CAS 1317-65-3) Slag wool fiber (CAS N/A) ogical limit values propriate engineering trols	Type TWA TWA TWA TWA No biological exposure limits noted fo Provide sufficient ventilation for opera exposure limits and minimize the risk Cut and trim with a utility knife or han a dust collection system. Operations a to remove dust are not recommended such as personal protective equipment	5 mg/m3 10 mg/m3 5 mg/m3 10 mg/m3 3 fibers/cm3 5 mg/m3 r the ingredient(s). tions causing dust formation. C of exposure. d saw to minimize dust levels. I such as power cutting, power ke I (2). See Section 16 for further	Form Respirable. Total Respirable. Total Fiber, respirable (diameter $\leq 3.5 \ \mu m$ and length $\geq 10 \ \mu m$) Fiber, total Observe occupational f a router is used it must have
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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 separately from regular wash. Observe any medical surveillance requirements.

9. Physical and chemical properties

5. Filysical and chemical p	bioperties
Appearance	
Physical state	Solid.
Form	Panel or tile.
Color	Various colors.
Odor	Low to no odor.
Odor threshold	Not applicable.
рН	9
Melting point/freezing point	2200 °F (1204.44 °C) (Slag wool)
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 exp	losive limits
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not applicable.
Explosive limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	0.39 - 0.49 (H20=1)
Solubility(ies)	
Solubility (water)	Very low solubility 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	24 - 30 lb/ft ³
VOC (Weight %)	N/A (solid) (See section 16 for further detail)
10. Stability and reactivity	

Not available.
Material is stable under normal conditions.
Hazardous polymerization does not occur.
Contact with incompatible materials.
Strong oxidizing agents.

USG® Glacier™ Basic Acoustical Ceiling Panels

917469 Version #: 01 Revision date: - Issue date: 26-November-2014

11. Toxicological information

Information on likely routes of exposure Inhalation of dusts may cause respiratory irritation. Inhalation May cause irritation through mechanical abrasion. Skin contact Eve contact Direct contact with airborne particulates may cause temporary irritation. Ingestion Ingestion may cause irritation and stomach discomfort. Symptoms related to the Under normal conditions of intended use, this material does not pose a risk to health. physical, chemical and toxicological characteristics Information on toxicological effects Acute toxicity Not expected to be a hazard under normal conditions of intended use. Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation. Serious eye damage/eye irritation Respiratory or skin sensitization **Respiratory sensitization** No data available, but none expected. Skin sensitization This product is not expected to cause skin sensitization. Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

 Carcinogenicity
 Not expected to cause cancer.

 OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

 Not listed.

 Reproductive toxicity

 No data available.

 Specific target organ toxicity - single exposure

 Specific target organ toxicity - repeated exposure

 No data available, but none expected.

 repeated exposure

Due to the physical form of the product it is not an aspiration hazard.

12. Ecological information

Aspiration hazard

Ecotoxicity	The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent releases can have a harmful or damaging effect on the environment.
Persistence and degradability	No data is available on the degradability of this product.
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	Not regulated.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of in accordance with local regulations.

14. Transport information

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable. This product is a solid. Therefore, bulk transport is governed by IMSBC code. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard **US** federal regulations Communication Standard, 29 CFR 1910.1200. TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) Not regulated. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed. CERCLA Hazardous Substance List (40 CFR 302.4) Not listed. Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No SARA 302 Extremely hazardous substance Not listed SARA 311/312 Hazardous Yes chemical 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. Not regulated. Safe Drinking Water Act (SDWA) **US** state regulations **US. Massachusetts RTK - Substance List** Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5) Limestone (CAS 1317-65-3) US. New Jersey Worker and Community Right-to-Know Act Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5) Limestone (CAS 1317-65-3) US. Pennsylvania Worker and Community Right-to-Know Law Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5) Limestone (CAS 1317-65-3) **US. Rhode Island RTK** Not regulated. **US. California Proposition 65** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm International Inventories Country(s) or region On inventory (yes/no)* Inventory name United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory No *A "Yes" indicates this product complies 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

16. Other information, inc	luding date of preparation or last revision
Issue date	26-November-2014
Revision date	-
Version #	01
Further information	Slag Wool Fiber: Large morbidity and mortality studies of both European and North American mineral wool manufacturing workers have been conducted. These studies have found no significant association of non-malignant (i.e. fibrosis) or malignant (i.e., lung cancer or mesothelioma) lung disease and exposures to slag wool fibers and have not established a causal relationship between exposure and non-malignant or malignant diseases.
	In 2001, the International Agency for Research on Cancer (IARC) assigned slag wool fiber to the Group 3 category ["not classifiable as to carcinogenicity to humans"]. The synthetic mineral fiber used in this product is exonerated from classification as a carcinogen in accordance with Note Q in the EU Commission Directive 97/69/EC.
	Titanium dioxide: Raw materials and/or coatings in this product contain small amounts of titanium dioxide. The International Agency for Research on Cancer (IARC) has determined that titanium dioxide is possibly carcinogenic to humans (Group 2B) based on inadequate evidence in humans and sufficient evidence in experimental animals. This conclusion relates to long-term inhalation exposure to high concentrations of pigmentary (powdered) or ultrafine titanium dioxide. However, no significant exposure to primary particles of titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other materials, such as in paints. The available human studies do not suggest an association between occupational exposure to titanium dioxide and risk for cancer (1). The American Conference of Governmental Industrial Hygienists (ACGIH) has designated this chemical as not classifiable as a human carcinogen (A4). The US National Toxicology Program (NTP) has not listed this chemical in its report on carcinogens.
	VOC Emissions: USG certifies the products listed in Section 1 of this SDS as Low-Emitting, defined as below the emissions of the concentration for each individual volatile organic chemical of concern (VOC) as specified in the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Small-Scale Environmental Chambers Version 1.1 [CDPH/EHLB/Standard Method V1.1 (February 2010); aka, chamber testing portion of CA Section 01350] and ASTM Guide D5116-06.
	NFPA Ratings: Health: 1 Flammability: 0 Physical hazard: 0 Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe
HMIS® ratings	Health: 0 Flammability: 0 Physical hazard: 0
NFPA ratings	
References	 International Agency for Research on Cancer (IARC). Volume 93: Carbon Black, Titanium Dioxide, and Talc; (5. Summary of data reported). IARC, 2010. Available at: <http: eng="" mono93.pdf="" monographs="" monographs.iarc.fr="" vol93=""></http:> North American Insulation Manufacturer's Association (NAIMA). Working Smart with Fiber Glass, Rock Wool and Slag Wool Products. NAIMA, 2007. Available at: <http: n059.pdf="" publications="" www.naima.org=""></http:>
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.