



SAFETY DATA SHEET

1. Identification

Product identifier	USG® DUROCK™ Brand Glass-Mat Tile Backerboard
Other means of identification	
SDS number	54000004006
Synonyms	Gypsum Panels, Drywall, Plasterboard, Wallboard
Recommended use	Interior use.
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	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.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	≥ 85
Continuous filament glass fiber	65997-17-3	< 5
Sodium pyrithione	3811-73-2	< 0.25
Class C Flyash	68131-74-8	< 10
Carbon black	1333-86-4	< 0.25

Composition comments All concentrations are in percent by weight unless ingredient is a gas.

The gypsum used to manufacture these panels contains respirable crystalline silica ranging up to 0.56 percent by weight, depending on source, as indicated by bulk sampling methods. Industrial hygiene testing using both personal and area sampling measured no detectable respirable crystalline silica when cutting the product by "score and snap," rotary saw, or circular saw. Good work practices which minimize the extent of dust generation should be followed.

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.

6. Accidental release measures

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. When moving board with a forklift or similar equipment, it is essential that the equipment be rated capable of handling the loads. The forks should always be long enough to extend completely through the width of the load. Fork spacing between supports should be one half the length of the panels or base being handled so that a maximum of 4' extends beyond the supports on either end.
Conditions for safe storage, including any incompatibilities	Follow traditional building practices; such as management of water away from the interior of the structure to avoid the growth of mold, mildew and fungus. Remove any building products suspected of being exposed to sustained moisture and considered conducive to mold growth from the job site. Gypsum panels are very heavy, awkward loads posing the risk of severe back injury. Use proper lifting techniques. Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Protect product from physical damage. Protect from weather and prevent exposure to sustained moisture. Gypsum Association literature (GA-801-07) recommends storing board flat to avoid damaging edges, warping the board and the potential safety hazards of the board falling over. However, in other situations, storing the board flat may cause a tripping hazard or exceed floor limit loads. If stacking board vertically, leave at least 4 inches from the wall to decrease the risk of falling board and no more than 6 inches to avoid too much lateral weight against the wall.

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m ³	Respirable fraction.
Carbon black (CAS 1333-86-4)	PEL	15 mg/m ³ 3.5 mg/m ³	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	10 mg/m ³	Inhalable fraction.
Carbon black (CAS 1333-86-4)	TWA	3.5 mg/m ³	Inhalable fraction.
Continuous filament glass fiber (CAS 65997-17-3)	TWA	1 fibers/cm ³ 5 mg/m ³	Respirable fibers (length > 5 µm & aspect ratio ≥ 3:1) Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	TWA	5 mg/m ³	Respirable.
Carbon black (CAS 1333-86-4)	TWA	10 mg/m ³ 3.5 mg/m ³	Total
Continuous filament glass fiber (CAS 65997-17-3)	TWA	3 fibers/cm ³ 5 mg/m ³	Respirable fibers (≤ 3.5 µm in diameter & ≥ 10 µm in length) Fiber, total

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

It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.

Other

Normal work clothing (long sleeved shirts and long pants) is recommended.

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. Observe any medical surveillance requirements.

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	Panel.
Color	Gray to off-white.

Odor Low to no odor.

Odor threshold Not applicable.

pH 9 - 10

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

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 2.32 (Gypsum) (H₂O=1)

Solubility(ies)

Solubility (water) 0.26 g/100 g (H₂O)

Partition coefficient (n-octanol/water) Not applicable.

Auto-ignition temperature Not applicable.

Decomposition temperature 2642 °F (1450 °C)

Viscosity Not applicable.

Other information

Bulk density 48 - 52 lb/ft³

Particle size Varies.

VOC (Weight %) 0 %

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. Strong acids.

Hazardous decomposition products Calcium oxides, carbon dioxide, and carbon monoxide.

11. Toxicological information

Information on likely routes of exposure

Ingestion Not likely, due to the form of the product.

Inhalation Mechanical processing may generate dust. Gypsum dust has an irritant action on mucous membranes of the upper respiratory tract and eyes (1).

Skin contact	Under normal conditions of intended use, this material does not pose a skin hazard. Gypsum was not found to be a skin irritant (2).
Eye contact	Mechanical processing may generate dust. Direct contact with eyes may cause temporary irritation (1).
Symptoms related to the physical, chemical and toxicological characteristics	Under normal conditions of intended use, this material does not pose a risk to health.
Information on toxicological effects	
Acute toxicity	Low hazard.
Skin corrosion/irritation	Gypsum was not found to be a skin irritant.
Serious eye damage/eye irritation	Gypsum does not cause serious eye damage or irritation.
Respiratory or skin sensitization	
Respiratory sensitization	No data available, but based on results from the skin sensitization study, calcium sulfate is not expected to be a respiratory sensitizer.
Skin sensitization	Not a skin sensitizer (2).
Germ cell mutagenicity	No evidence of mutagenic potential exists (3,4,5).
Carcinogenicity	No evidence of carcinogenic potential exists (6).
IARC Monographs. Overall Evaluation of Carcinogenicity	
Continuous filament glass fiber (CAS 65997-17-3)	3 Not classifiable as to carcinogenicity to humans.
NTP Report on Carcinogens	
Continuous filament glass fiber (CAS 65997-17-3)	Reasonably Anticipated to be a Human Carcinogen.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	
Not listed.	
Reproductive toxicity	No evidence of reproductive toxicity exists (2).
Specific target organ toxicity - single exposure	Not toxic to lung tissue.
Specific target organ toxicity - repeated exposure	Not toxic to lung tissue (6).
Aspiration hazard	Due to the physical form of the product it is not an aspiration hazard.
Further information	Pre-existing skin and respiratory conditions including dermatitis, asthma and chronic lung disease might be aggravated by exposure.

12. Ecological information

Ecotoxicity	The product contains a substance which is very toxic to aquatic organisms.		
	Components	Species	Test Results
	Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
	Aquatic		
	Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) > 1970 mg/l, 96 hours
Persistence and degradability	Not applicable for the salt of inorganic compounds. Calcium sulfate dissolves in water without undergoing chemical degradation.		
Bioaccumulative potential	Bioaccumulation is not expected.		
Mobility in soil	Calcium sulfate has a low potential for adsorption to soil. If water is applied, gypsum dissolves and the calcium and sulfate ions are mobile and penetrate the subsoil (7).		
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.

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. This product is a solid. Therefore, bulk transport is governed by IMSBC code.

15. Regulatory information

US federal regulations This product is not hazardous according to OSHA 29CFR 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 chemical No

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

US. Massachusetts RTK - Substance List

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Carbon black (CAS 1333-86-4)

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

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Carbon black (CAS 1333-86-4)

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

Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)
Carbon black (CAS 1333-86-4)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Carbon black (CAS 1333-86-4)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*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

Issue date 05-August-2014

Revision date -

Version # 01

Further information 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: 1

Flammability: 0

Physical hazard: 0

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

NFPA ratings



List of abbreviations

NFPA: National Fire Protection Association.

References

1. US National Library of Medicine (NLM) (1998). Hazardous Substances Data Bank (HSDB).
2. Tested by LG Life Science/Toxicology Center, Korea (2002). National Institute of Environmental Research (NIER).
3. Dopp E et al. (1995). Environ. Health Perspect. 103(3), 268-271.
4. Cremer H.H. et al. (1988). Wiss. Umwelt. 4, 202-205.
5. Fujita H et al. (1988). Kenkyu Nenpo-Tokyo-Toritsu Eisei Kenkyunsho. 39, 343-350.
6. Clouter et al. (1998). Inhal. Toxicol. 10, 3-14.
7. Shainberg et al. (1989). Advanced Soil Sci. 9, 1-111.

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.