

DUROCK® BRAND CEMENT BOARD

1. IDENTIFICATION

Product identifier

Durock® Cement Board (with or without EdgeGuard™)

Synonym(s)

Cement Underlayment Board, Cement Panels

Recommended use

Interior or exterior use

Recommended restrictions

Use in accordance with manufacturer's recommendations.

Manufacturer / Importer / Supplier / Distributor information/Company name

USG Middle East Ltd

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Second Industrial City

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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

Environmental hazards

Not classified.

OSHA defined hazards

Not classified.

Label elements

Signal word

Danger

Hazard statement

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

Precautionary statement

Prevention

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

Response

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

Storage Disposal

Store locked up. Store in a well-ventilated place. Keep container tightly closed. Dispose of in accordance with local, state, and federal regulations.

Hazard(s) not otherwise classified (HNOC)

None known

Supplemental information

Not applicable.



3. COMPOSITION/ INFORMATION ON INGREDIENTS

Mixtures

Chemical name	CAS number	%
Portland Cement	65997-15-1	< 50
Class C Fly ash	68131-74-8	< 15
Calcium sulfate dihydrate (alternative CAS 10101-41-4)	13397-24-5	< 10
Perlite	93763-70-3	<10
Continuous filament glass fiber Impurities	65997-17-3	<5

Impurities

Chemical name	CAS number	%
Crystalline silica (Quartz)	14808-60-7	<0.5

Composition comments

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

Raw materials in this product contain respirable crystalline silica as an impurity. The weight percent of respirable crystalline silica found in this product is < 0.5%. 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 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

Dust may cause skin, eye, throat and respiratory system irritation 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 & 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

Conditions for safe storage, including any incompatibilities

Store all Durock© Panels flat. Store in an enclosed materials shelter providing protection from damage and exposure to the elements.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTIONV

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

Components	CAS number	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)	PEL	5 mg/m³	Respirable fraction
Portland Cement (CAS 65997-15-1)	PEL	15 mg/m³ 5 mg/m³ 15 mg/m³	Total dust. Respirable fraction. Total dust

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

Components	CAS number	Value	Form
Class C Fly ash (CAS 68131-74-8)	TWA	0.8 mg/m ³	
Portland Cement (CAS 65997-15-1)	TWA	20 mppcf 50 mppcf	
Impurities	CAS number	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.3 mg/m ³ 0.1 mg/m ³	Total dust. Respirable.

US. ACGIH Threshold Limit Values

Components	CAS number	Value	Form
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS13397-24-5)	TWA	10 mg/m ³	Respirable fraction.
Continuous filament glass fiber (CAS 65997-17-3)	TWA	1 fibers/cm ³	Respirable fibers (length > 5µm & aspect ratio
Portland Cement (CAS 65997-15-1)	TWA	5 mg/m3 1 mg/m3	3:1) Inhalable fraction. Respirable fraction.
Impurities	CAS number	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.25mg/m ³	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	CAS number	Value	Form
Calcium sulfate dihydrate (Alternative CAS 10101-41-4) (CAS13397-24-5)	TWA	5 mg/m³	Respirable
Class C Fly ash (CAS 68131-74-8) Continuous filament glass fiber (CAS 65997-17-3)	TWA	10 mg/m³ 6 mg/m³	Stable
Continuous filament glass fiber (CAS 65997-17-3)	TWA	3 fibers/cm³	Respirable fibers (3.5 µm in diameter & 10 µm in length)Total dust
Perlite (CAS 93763-70-3) Portland Cement (CAS 65997-15-1)	TWA TWA	5 mg/m ³ 5 mg/m ³ 10 mg/m ³ 5 mg/m ³	Fiber, Total Respirable. Total Respirable. Total
Impurities	CAS number	Value	Form
Crystalline silica (Quartz) (CAS 14808-60-7)	TWA	0.05mg/m ³	Respirable dust.

Biological limit values

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

Appropriate engineering controls personal protective equipment

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

Wear approved safety goggles.

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

Board.

Color

Gray

Odor

Low to no odor.

Odor threshold

Not applicable.

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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

0.8 - 1.2 (H2O=1)

Solubility(ies)

960 - 1040 kg/m³

Partition coefficient (n-octanol/water)

Not applicable.

Auto-ignition temperature

Not applicable.

Decomposition temperature

Not applicable.

Viscosity

Not applicable.

Other information

Bulk density

 $960 - 1050 \text{ kg/m}^3$

Particle size

Varies.

VOC (Weight %)

0 %

10. STABILITY AND REACTIVITY

Reactivity

Not available.

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

Ingestion Inhalation

Ingestion may cause irritation and stomach discomfort.

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

Dust can cause eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Dust may irritate eyes, skin, throat and upper respiratory system and cause coughing.

Information on toxicological effects

Low hazard.

Acute toxicity

Not expected to be a hazard under normal conditions of intended use.

Skin corrosion/irritation

Dust can cause skin irritation.

Serious eye damage/eye irritation

Dust can cause eye irritation.

Respiratory or skin sensitization

Not a sensitizer.

Skin sensitization

Not expected to be a skin sensitizer.

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 exposure to high levels of respirable crystalline silica may cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Class C Fly ash (CAS 68131-74-8)

3 Not classifiable as to carcinogenicity to humans.

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

1 Carcinogenic to humans.

NTP Report on Carcinogens

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

Known To Be Human Carcinogen.

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.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not expected to be hazardous to the environment.

Components	Species	Test Results
Calcium sulfate dihydrate (alternative CAS 10101-41-4) (CAS 13397-24-5)		
Aquatic fish	LC50 Fathead minnow (Pimephales pro-melas)	> 1970 mg/l, 96 hours
Persistence and degradability Bioaccumulative potential Mobility in soil Other adverse effects	No data is available on the degradability of this product. Bioaccumulation is not expected. No data available. 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 a hazardous material by DOT.

ADR

Not regulated as a dangerous good.

IATA

Not regulated as a dangerous good.

IMDG

Not regulated as a dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

This product is a solid. Therefore, bulk transport is governed by IMS- BC code.

Portland Cement

15. REGULATORY INFORMATION

Saudi Arabian Inventory of Chemical Substance:

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CAS#	68131-74-8	Class C Fly ash
CAS#	13397-24-5	Calcium sulfate dihydrate
CAS#	93763-70-3	Perlite
CAS#	65997-17-3	Continuous filament glass fiber
CAS#	14808-60-7	Crystalline silica (Quartz)

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Issue date

1-September-2019

CAS# 65997-15-1

Revision date

1-February-2023

Version

02

Further information

Crystalline silica: Raw materials in this product may contain respirable crystalline silica. 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: 1

Flammability: 0 Physical hazard: 0

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

Abbreviations and acronyms



Disclaimer

GHS: Globally Harmonized System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service (division of the American Chemical Society) IARC: International Agency for Research on Cancer

TWA: Time Weighted Average PEL: Permissible Exposure Limit

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.

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