



Material Safety Data Sheet

USG BORAL

Boral Plasterboard (M) Sdn Bhd 47816U
Plot 28-33, Jalan Perusahaan Satu,
Parit Buntar Industrial Estate,
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1 PRODUCT IDENTIFICATION

<u>Product Name:</u>	12.5mm Firestop
<u>Brand:</u>	USG Boral
<u>Use:</u>	Liner panels used in fire area systems.
<u>General Appearance:</u>	Plasterboard is a solid material that is composed of paper covered gypsum board. The paper covering can be in grey, brown, blue or pink, while the internal gypsum board is an off-white, yellowish or greyish colour.

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients

CHEMICAL ENTITY	CAS No.	PROPORTION
* Gypsum	[10101-41-4]	>60%
* Clay	[1332-58-7]	<10%
* Fly ash	[68131-74-8]	<10%
* Vermiculite	[1318-00-9]	<10%
Starch	[9005-25-8]	<2%
Glass Filaments	[6599-17-3]	<2%

* This ingredient contains a small quantity of crystalline silica (quartz).
The average crystalline silica (quartz) content of the final product is less than 2%.

3 HAZARD INFORMATION

A short term exposure to ceiling panel dust presents little or no hazard.

4 FIRST AID MEASURES

D. First Aid Measures

Eye Contact:

Flush eyes thoroughly with plenty of clean water for at least 15 minutes, including under lids, to remove all particles. If irritation persists seek medical attention to ensure foreign matter is removed and check for abrasions.

Skin Contact:

Wash with cool water and a pH neutral soap or a mild skin detergent. Apply skin moisturiser. If skin is irritated with appearance of rashes, seek medical attention.

Inhalation:

Move person to fresh air. Allow to rest. Seek medical attention if discomfort persists or coughing and other symptoms do not subside.

Ingestion:

Do not induce vomiting. If conscious, drink plenty of water to delay the hardening of calcium sulfate in the stomach if actual ingestion has occurred. Seek medical attention immediately.

Note to Doctor: Treat symptomatically.

5 FIRE AND EXPLOSION HAZARDS

Emergency Overview:

The ceiling panel is odourless, not combustible or explosive. Dust may occur during handling, cutting and installation.

Fire Fighting Measures

This product poses no fire-related hazard. When fighting any fire, use extinguishing media appropriate for surrounding fire.

6 ACCIDENTAL RELEASE MEASURE

General Controls

Minimize dust generation and accumulation. Use good safety and industrial hygiene practices.

Comply to local OSHA exposure standards.

Governmental action level

Total Dust: 5 mg/m³.

Respirable Dust: 2.5mg/m³

Crystalline Silica (quartz): 0.05 mg/m³

Cutting, crushing or sanding this product or other crystalline silica-bearing materials will release respirable crystalline silica. Use all appropriate measures of dust control or suppression and PPE as described below.

Engineering Controls

Avoid generating dust. If dust is created when using power operated equipment for cutting or drilling the product in an enclosed or poorly ventilated area local dust extraction is recommended. Work areas should be cleaned regularly by wet sweeping or vacuuming. Maintain dust levels below exposure limits.

7 HANDLING AND STORAGE INFORMATION

A. Storage:

Store in a dry, ventilated area away from sources of heat, moisture and incompatibilities such as strong acids or strong oxidizers. Protect product from physical damage. Protect from weather and prevent exposure to sustain moisture.

It is recommended to store the board flat to avoid damaging edges, warping the board and the potential safety hazards of falling over if it is placed vertically.

B. Handling:

Ceiling panel is heavy and poses risks such as sprains and strains to the back, arms, shoulders and legs during lifting. Handle with care and use appropriate control measures when handling it manually.

It is recommended to use forklift or other handling equipment to transport the ceiling panels.

When moving panels with a forklift, it is essential that the forklift be rated capable of handling the loads. The forks should be long enough to extend completely through the width of the load.

C. Housekeeping:

Avoid actions that cause too much airborne dust during clean-up, e.g. using compressed air or dry sweeping. Recommend to use HEPA vacuum or to thoroughly wet with water to clean-up dust.

Clean-up crew to avoid creating or inhaling dust, and wear appropriate PPE.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protection

Respiratory Protection:

Under ordinary conditions, no respiratory protection is required. Wear a DOSH / NIOSH approved respirator that is properly fitted and is in good condition when exposed to dust above exposure limits. Minimum of N-95 type respirator is recommended at areas where the dust is likely to exceed the exposure standard.

Note: Persons with facial hair may be unable to obtain a satisfactory face seal.

Eye Protection:

Wear safety glasses or goggles when handling ceiling panels under high dust concentration or windy condition, to prevent dust coming in contact with eyes. Wearing contact lenses when handling this product is not recommended.

Skin Protection:

Glove: Wear impervious PVC, nitrile or rubber gloves if prolonged skin contact is anticipated when handling ceiling panels.

Clothing: General work clothes are satisfactory. Remove and launder clothing that is dusty before it is reused.

9 PHYSICAL / CHEMICAL CHARACTERISTICS

PHYSICAL DESCRIPTION/PROPERTIES

<u>Appearance and Odour:</u>	Paper covered white, yellowish or greyish core, low odour.
<u>Solubility in Water:</u>	0.2%
<u>Board Density:</u>	Approx. 840 kg/m ³
<u>Hardening Time:</u>	Not Applicable
<u>Boiling Point/Melting Point:</u>	Not Applicable
<u>Vapour Pressure:</u>	Not Applicable
<u>Flashpoint:</u>	Not Applicable
<u>Flammability Limits:</u>	Not Applicable

10 STABILITY & REACTIVITY

<u>Incompatibility:</u>	Not Applicable
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11 TOXICOLOGICAL INFORMATION

C. Potential Health Effects:

<u>Eye Contact:</u>	Dust from this product may cause immediate or delayed irritation or inflammation to the eyes. Eye exposures require immediate first aid to prevent further damage to the eyes.
<u>Skin Contact:</u>	Prolonged contact with dust from this product may cause dryness, discomfort and irritation of the skin from friction but is not absorbed through the skin.
<u>Inhalation (Acute):</u>	Breathing dust from this product may cause irritation of the nose, throat or lungs, can also cause coughing and sneezing depending on the degree of exposure.
<u>Inhalation (Chronic):</u>	No known long term health effects when proper precautions are taken during handling of this product. But risk of injury depends on duration and level of exposure.
<u>Ingestion:</u>	Do not ingest ceiling panels, which is unlikely under normal conditions of use. Ingesting small quantities of ceiling panel is not known to be harmful; ingesting large quantities may result in abdominal discomfort and intestinal distress.
<u>Medical Conditions Aggravated by Exposure:</u>	Individuals with lung disease (e.g. bronchitis, emphysema, COPD, pulmonary diseases) can be aggravated by exposure to dust from this product.

12 ECOLOGICAL INFORMATION

Appropriate measures are taken to prevent this product from entering the environment.

13 DISPOSAL METHOD

D. Disposal Method:

Place broken material and product dust into waste container. Dispose to landfill in accordance to federal, state, provincial and local laws and regulations. Contact local waste disposal authority.

14 TRANSPORT INFORMATION

Not classified as hazardous for transport.

15 REGULATORY INFORMATION

DOE

This product is not listed as hazardous substance nor as hazardous waste as per the First Schedule of the EQA, ACT 127, Laws of Malaysia.

16 OTHER INFORMATION

Smoking

Smoking increases the risk of occupational respiratory diseases. It is recommended that all storage and work areas should be smoke-free zones.

Abbreviations

CAS No	Chemical Abstract Service Number
COPD	Chronic obstructive pulmonary disease
pH	Negative log of hydrogen ion
OSHA	Occupational Safety and Health Act
DOSH	Department of Occupational Safety and Health
NIOSH	National Institute for Occupational Safety and Health
PPE	Personal protective equipment
N-95	Particulate filter with 95% efficiency level
PVC	Polyvinyl chloride
HEPA	High-Efficiency Particulate Air
EQA	Environment Quality Act
DOE	Department of Environment

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Contact Person:	QA Engineer	

NOTICE

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Where the information provided herein discloses a potential hazard or hazardous ingredient, adequate warning should be provided to employees and users and appropriate precautions taken. PRACTICE GOOD INDUSTRIAL HYGIENE.

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