

# Material Safety Data Sheet (MSDS)

## BC Fire Proof 5 GP

### *Spray-Applied Fire Resistive Material*

#### SECTION 1: IDENTIFICATION

Product Name: BC Fire Proof 5 GP

Product Type: Gypsum-based Spray-Applied Fire Resistive Material (SFRM)

Recommended Use: Passive fire protection of interior structural steel, metal decking, and concrete substrates.

Manufacturer: Building Chemistry Industry (BCI)

Emergency Contact: To be filled by local distributor/company

Email / Phone: To be provided

#### SECTION 2: HAZARD IDENTIFICATION

GHS Classification:

- Skin Irritation — Category 3 (mild irritant)
- Eye Irritation — Category 2B
- Specific Target Organ Toxicity – Single Exposure (Respiratory irritation) — Category 3
- Not classified as hazardous for flammability, reactivity, or environmental toxicity.

#### GHS Label Elements:

⚠ Warning

Hazard Statements:

- H320: Causes eye irritation.
- H335: May cause respiratory irritation when inhaled as dust.
- H316: Causes mild skin irritation.

Precautionary Statements:

- P261: Avoid breathing dust.

- P280: Wear protective gloves, clothing, eye protection, and dust mask.
- P305 + P351: IF IN EYES: Rinse cautiously with water.
- P302 + P352: IF ON SKIN: Wash with soap and water.
- P304 + P340: IF INHALED: Remove person to fresh air.
- P312: Seek medical advice if symptoms persist.

Other Hazards:

- Contains gypsum, cementitious binders, and lightweight aggregates.
- Not combustible.
- No asbestos, mineral wool, or crystalline silica added.

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS Number	Approx. %	Notes
Gypsum (Calcium Sulfate Hemihydrate)	10034-76-1	40-70%	Base binder
Portland Cement	65997-15-1	10-25%	Alkaline; irritation risk
Lightweight Aggregates	Various	10-30%	Vermiculite/perlite type
Additives & Fibers	Proprietary	<5%	Performance enhancers

### SECTION 4: FIRST AID MEASURES

Inhalation: Move to fresh air. If coughing or respiratory symptoms persist, seek medical attention.

Skin Contact: Wash with soap and water. Remove contaminated clothing.

Eye Contact: Rinse cautiously with clean water for 15 minutes. Seek medical help if irritation continues.

Ingestion: Rinse mouth. Drink water. Do not induce vomiting. Seek medical

attention if discomfort appears.

Major Symptoms: Eye redness, skin dryness, respiratory irritation from dust.

## **SECTION 5: FIRE-FIGHTING MEASURES**

- Product is non-combustible.
- No unusual fire hazards.
- Use water spray, CO<sub>2</sub>, or dry chemical extinguishers for surrounding materials.
- No hazardous combustion gases expected.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Dry Material (Powder):

- Avoid dust formation.
- Sweep or vacuum into containers.
- Prevent product from entering drains.

Wet Material:

- Scrape and collect for disposal.
- Wash contaminated area with water.

Use PPE: gloves, goggles, dust mask.

## **SECTION 7: HANDLING AND STORAGE**

Handling:

- Avoid dust generation.
- Use in well-ventilated areas.
- Do not use partially set or contaminated material.

Storage:

- Store bags indoors, dry, and on pallets.
- Protect from moisture.

- Temperature range: 4°C to 38°C (40°F – 100°F).

Shelf Life: 12 months in unopened packaging.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits (Typical):

- Total dust (OSHA PEL): 15 mg/m<sup>3</sup>
- Respirable dust (OSHA PEL): 5 mg/m<sup>3</sup>

Engineering Controls:

- Use mechanical ventilation when spraying indoors.
- Provide minimum 4 air changes per hour during curing phase.

Personal Protective Equipment (PPE):

- Respiratory: N95 dust mask or better.
- Eye: Safety goggles.
- Skin: Gloves and protective clothing.
- Other: Safety shoes.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Appearance	Tan-colored dry powder
Odor	Odorless
pH (wet mix)	10–11 (alkaline)
Density (Dry In-Place)	≥ 240 kg/m <sup>3</sup> (15 pcf)
Flash Point	Not applicable
Solubility	Slight in water
VOC Content	0 g/L

## **SECTION 10: STABILITY AND REACTIVITY**

- Stable under normal storage and use.
- Avoid contact with strong acids.
- No hazardous polymerization.
- Reacts with water to harden.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Likely Routes of Exposure: Inhalation, skin/eye contact.

Effects:

- Mild irritation to eyes and skin.
- Respiratory irritation from dust.
- No chronic health effects known for product as supplied.
- Not classified as carcinogenic (no asbestos, no added crystalline silica).

## **SECTION 12: ECOLOGICAL INFORMATION**

- Not expected to be environmentally hazardous.
- Non-toxic minerals and gypsum.
- Large releases may affect water pH temporarily.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

- Dispose of in accordance with local regulations.
- Hardened material can be disposed of as construction waste.
- Do not discharge wet slurry into drains.

## **SECTION 14: TRANSPORT INFORMATION**

Not regulated as dangerous goods under:

- DOT
- IMDG
- IATA

- ADR

No special transport requirements.

## **SECTION 15: REGULATORY INFORMATION**

- Complies with GHS and OSHA Hazard Communication Standard (29 CFR 1910.1200).
- Not classified as hazardous under transport or environmental regulations.
- No special labeling required beyond standard GHS for irritants.

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