



SAFETY DATA SHEET

MATERIAL: SYNTHETIC GYPSUM

Section 1 – Product Identification

Product Identifier

Product Name: Synthetic Gypsum

Synonyms: Gypsum, calcium sulfate, syn gyp, FGD gypsum

Product Form: Solid

Intended Use of Product: Synthetic gypsum is a byproduct of flue gas desulfurization and is used as an additive in the manufacture of portland cement to prevent flash setting of concrete. It is also used in the manufacture of drywall and drywall compounds.

Name, Address and Telephone of Responsible Party

Holcim (US) Inc.
24 Crosby Drive
Bedford, MA 01730
(888) 646-5246

Emergency Contact Information:

CHEMTREC: 1-800-424-9300

Section 2 – Hazards Identification

Classification of the Substance or Mixture

Classification (GHS-US)

Respiratory irritant 3
Eye irritant 2B

Label Elements Hazard Pictograms



Signal Word Hazard Statements

Warning
May cause respiratory irritation
Causes eye irritation

Precautionary Statements

Prevention Avoid breathing dust.
Wear eye protection/face protection.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in well-ventilated area.

Response **If inhaled:** Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
If on skin: No special response indicated.
If swallowed: No special response indicated.

Storage Store in a well-ventilated place. Keep container tightly closed.

Disposal Dispose of contents/container in accordance with local/state/national regulations.

Other Hazards

None determined.

Section 3 – Composition/Information on Ingredients

Component/Ingredient	CAS #	Percent Present (Range)
calcium sulfate dihydrate	10101-41-4	98 - 100
Nuisance Dusts (Particulates not otherwise regulated)	None	< 1 - 2

Other Components

Synthetic gypsum (calcium sulfate dihydrate) is manufactured when limestone reacts with sulfur dioxide released into a gas stream from the combustion of coal. Trace amounts of naturally occurring chemical compounds might be detected during chemical analysis depending on the source of the limestone and coal. These may include trace amounts of magnesium sulfate, free crystalline or amorphous silica and sulfur compounds.

Section 4 – First Aid Measures

Description of First Aid Measures

Eyes	Rinse eyes and under lids cautiously with clean water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin	No special measures required.
Inhalation	Remove person to fresh air away from dust and keep comfortable for breathing. If symptoms persist, obtain medical attention.
Ingestion	No special measures required.

Important Symptoms and Effects (Acute and Delayed)

Eyes	May cause eye irritation and may scratch eye surface due to particle abrasion.
Skin	None expected.
Inhalation	May irritate nose and throat if dust is inhaled. May cause coughing, sneezing, and mucous discharge.
Ingestion	None expected.

Recommendations for Immediate Medical Care or Special Treatment

Seek immediate medical attention for inhalation of large quantities of dust. Seek immediate medical attention if material comes into contact with eyes and cannot be immediately removed.

Section 5 – Fire Fighting Measures

General Fire Hazards	None. Material is not considered flammable or combustible.
Extinguishing Media	Use water or water spray to extinguish any fires involving this material.
Extinguishing Media to Avoid	None.
Hazards of Combustion	None.
Fire Fighting Recommendations	Firefighters should always wear full protective gear to fight any fire. Refer to Section 9 for flammability information.

Section 6 – Accidental Release Measures

Precautions	Avoid creating dust.
Personal Protection	Wear respiratory protection and protective eyewear to avoid eye contact.
Emergency Procedures	Ventilate area and avoid creating dust. Remove unnecessary persons from area.
Containment Procedures	Barricade solid material to prevent additional spillage.
Clean Up Procedures	Scoop or vacuum up spilled material while avoiding dust creation.

Section 7 – Handling and Storage

Safe Handling Practices	Avoid contact with eyes. Avoid breathing dust. Use only in well ventilated areas. Wear appropriate personal protective equipment to prevent eye contact and use respiratory protection equipment if dusty or in poorly ventilated areas.
Safe Storage Measures	Store in dry, well-ventilated areas away from incompatible materials. If stored in containers, keep containers closed when not in use.
Incompatible Materials	Diazomethane, aluminum, phosphorus, strong oxidizers, strong acids [Note: Hygroscopic (i.e., absorbs moisture from the air).]

Section 8 – Exposure Controls & Personal Protection

Exposure Limits for Individual Components (T= Total Respirable, R=Respirable fraction, I=Inhalable-aerosol)

Component	OSHA PEL	ACGIH TLV	NIOSH REL
Calcium sulfate dihydrate	15 mg/m ³ (T); 5 mg/m ³ (R)	10 mg/m ³	10 mg/m ³ (T); 5 mg/m ³ (R)
Nuisance Dusts (PNOR)	15 mg/m ³ (T); 5 mg/m ³ (R)	10 mg/m ³	Not established

Exposure Controls

Engineering Controls

Use outdoors in well-ventilated areas; otherwise employ natural or mechanical ventilation to maintain exposure within applicable limits.

Personal Protection

Avoid contact with skin or eyes. Avoid creating or breathing dust.

Face and Eyes

Safety glasses with side shields or protective goggles should be worn while using this product. For extremely dusty conditions, non-vented goggles or goggles with indirect venting are recommended. Avoid contact lens wear when using this product.

Body

Long sleeved shirts and trousers should be worn while using this material.

Respiratory

If exposure levels cannot be maintained below acceptable limits, suitable particulate-filtering facemasks or respirators approved by MSHA/NIOSH should be worn in accordance with the user's respiratory protection program and OSHA/MSHA guidelines.

Hands

No special precautions are indicated.

Section 9 – Physical and Chemical Properties

Physical State	Solid, powder or lumps	Specific Gravity	2.32
Appearance & Color	White, gray, tan	Flash Point/Method	None. Not flammable.
Odor	None	Auto Ignition Temperature	Not determined
pH	5 - 7	Lower Flammability Limit	Not applicable
Boiling Point	Not applicable	Upper Flammability Limit	Not applicable
Solubility (Water)	Negligible (<1%)	Octanol/H ₂ O Coefficient	Not determined
Evaporation Rate	Not applicable	Viscosity	Not applicable
Melting Point	1450°C	Freezing Point	Solid at room temperature
Vapor Density	Not applicable	Explosion Risk: Static	Not considered a hazard
Vapor Pressure	Not applicable	Explosion Risk: Shock	Not considered a hazard

Section 10 – Stability and Reactivity

Reactivity

Stable material. Not considered reactive.

Chemical Stability

Stable at standard temperature and pressures.

Hazardous Reactions

None. Hazardous polymerization will not occur.

Conditions to Avoid

Material is hygroscopic and will absorb moisture from air.

Incompatible Materials

Diazomethane, aluminum, phosphorus, strong acids, strong oxidizers

Decomposition Hazards

Calcium oxide and oxides of sulfur generated when material melts

Section 11 – Toxicological Information

Product: Synthetic gypsum

Acute Toxicity

Not classified.

LD50/LC50 Data

Oral LD50 Rat 3000 mg/kg

Skin Corrosion/Irritation

Not reported/no data available.

Critical Eye Damage/Irritation

May cause eye injury due to particle abrasion and mechanical irritation.

Respiratory or Skin Sensitization

Not reported/no data available.

Germ Cell Mutagenicity

Not reported/no data available.

Teratogenicity

Not reported/no data available.

Carcinogenicity

Not reported/no data available.

Specific Organ Toxicity (Single Exposure)

Not reported/no data available.

Specific Organ Toxicity (Repeated Exposure)

May cause damage to lungs through repeated or prolonged exposure to respirable dust.

Reproductive Toxicity

Not reported/no data available.

Aspiration Respiratory Hazard

Not reported/no data available.

Symptoms: Inhalation

Coughing, sneezing, mucous discharge.

Symptoms: Skin Contact

May cause localized reddening through mechanical abrasion.

Symptoms: Eye Contact

Redness and itching. Extended contact may lead to corneal abrasion/ulceration.

Symptoms: Ingestion

None.

Other Toxicological Information

No additional data available.

Components**Toxicity****Carc: IARC****Carc: NTP****Carc: OSHA**

Components	Toxicity	Carc: IARC	Carc: NTP	Carc: OSHA
Calcium sulfate dihydrate	Oral LD50 Rat 3000 mg/kg	Not listed	Not listed	Not listed
Nuisance Dusts (PNOR)	No data	Not listed	Not listed	Not listed

Section 12 – Ecological Information**General Ecotoxicity**

Not classified.

Persistence and Degradability

Not reported/no data available.

Bioaccumulation Potential

Not reported/no data available.

Mobility in Soil to Groundwater

Not reported/no data available.

Environmental Fate

Not reported/no data available.

Other Environmental

None.

Precautions or Information**Section 13 – Disposal Considerations****Disposal Methods**

Dispose as an inert, non-metallic mineral in accordance with applicable federal, state, and local regulations.

Special Considerations

Avoid creation or breathing dust during disposal. Avoid contact with eyes.

Other Disposal Information

None.

Section 14 – Transport Information**Proper Shipping Name**

N/A – not regulated.

Hazard Class

N/A – not regulated.

UN Shipping ID Number

N/A – not regulated.

Packing Group

N/A – not regulated.

Environmental/IMDG Codes

N/A – not regulated.

Section 15 – Regulatory Information**Federal**

This product contains one or more chemical components or ingredients that may require identification and/or reporting under SARA Section 302, SARA Section 311/312/313, CERCLA and/or TSCA. An examination of the components of this product should be conducted by a qualified environmental professional to determine if such identification or reporting is required by federal law.

- Components: Calcium sulfate dihydrate

State

This product contains one or more chemical components or ingredients that are included or listed on the hazardous substances lists for one or more of the following states: California, Maine, Minnesota, New Jersey, Pennsylvania and Rhode Island. An examination of the components of this product should be conducted by a qualified environmental or safety and health professional to determine the specific requirements for those states.

- Components: Calcium sulfate dihydrate

Section 16 – Other Information

Date of last revision: May 14, 2015

Prepared and reviewed by: Holcim (US) Inc. Occupational Safety & Health

Other important information:

While the information provided in this document is believed to provide a useful summary of the hazards of synthetic gypsum, the information in this document cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product.

The data furnished in this document do not address hazards that may be posed by other materials when mixed with synthetic gypsum. Users should review other relevant safety data sheets before working with this product.

The information presented in the Safety Data Sheet is based on current knowledge and publications and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not be interpreted as guaranteeing any specific property of the product.

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--END OF SAFETY DATA SHEET--