

# MADA CEILING TILES

## Material Safety Data Sheet

SDS-CT-R01-Rev1 PVC Gypsum Tiles - June 2022

### Product Identification

#### Chemical Family:

Gypsum (Calcium Sulfate Dihydrate  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ) with Polyvinyl Chloride facing film and Metalized PET back film.

#### Use:

Mada Gypsum Ceiling Tiles are used as internal ceiling linings in buildings.

#### Contact Information:

##### Mada Gypsum Company

Yanbu Al Sinayah 51000  
P.O.Box 31542  
Kingdom of Saudi Arabia  
Web: www.madagypsum.com

For Emergency Product  
Information Call  
Telephone: +966 14 325 3253

### Hazard Identification

#### Emergency Overview:

Mada Ceiling Tiles do not present an inhalation, ingestion or contact health hazard. It is not recommended that sawing, sanding, grinding, or machining be performed on the product. Scoring and snapping method is recommended to avoid creating dust. If sawing is absolutely necessary, dust collection systems, vacuuming, and the utilization of side shield safety glasses, approved respirator, etc., may be necessary. Inhalation of dust generated from sawing and sanding could irritate nasal and throat tissues. Respiratory protection is necessary due to presence of HCl in PVC film.

#### Potential Health Effects:

- **Eye contact:** Airborne dust may cause irritation to the eye.
- **Skin contact:** May cause dryness, itching and irritation.
- **Ingestion:** Large amounts may cause intestinal discomfort or distress.
- **Inhalation:** Dust from cutting or sawing may cause irritation of nose, throat, or lungs.
- **Carcinogenic Potential:** Gypsum panels are not listed as a carcinogen by NTP, OSHA, or IARC. Vinyl Chloride is a suspect agent, handling and processing Polyvinyl Chloride are regulated by occupational Health and Safety Administration.



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## Composition / Information On Ingredients

Mada Ceiling Tiles consist of a Calcium Sulphate Dihydrate encased in paper on both the front and back sides and laminated with polyvinyl chloride film on the face and metalized foil on the back side. It may include minor amounts of quartz and other additives like starch, foam, and dispersant. The PVC film contains plasticizers and stabilizers. The Metalized PET film contains metalized PET, adhesive and Polypropylene. Contains no asbestos.

## First Aid Measures

- **Eye contact:** Remove contact lenses (if applicable). Flush eyes thoroughly with water, including under eyelids to remove all particles. Call physician immediately.
- **Skin contact:** Wash affected skin gently with soap and water.
- **Inhalation of airborne dust:** Expose to fresh air. Seek medical help if coughing and other symptoms do not subside.
- **Ingestion:** Not applicable for product in its supplied form.

## Fire And Explosion Hazard Data

- **Flash point:** None.
- **Lower Explosion Limit:** None.
- **Upper Explosion Limit:** None.
- **Auto Ignition Temperature:** Not Combustible.
- **Extinguishing Media:** Dry chemical, foam, fog or spray.
- **Special Fire Fighting Procedures:** None  
Although Mada Ceiling Tiles pose no fire related hazards, a self contained breathing apparatus is recommended to limit exposure to combustion product when fighting any fire.
- **Hazardous combustion product:** Above 1450°C gypsum could produce SO<sub>2</sub> and CaO. The thermal decomposition of the Polyvinyl Chloride causes release of chlorine gas and carbon dioxide (CO<sub>2</sub>) with a possibility of formation of smoke and traces of phosgene(COCl<sub>2</sub>). The Metalized PET film may release smoke and toxic gas.
- **Unusual fire and explosion hazards:** None.

## Accidental Release Measures

Not applicable, as product is an article composite.

### General recommendations:

- Wear appropriate Personal Protective Equipment. (See Personal Protection Section).
- Maintain proper ventilation.
- Pick-up larger pieces to avoid a tripping hazard. Return large pieces of damaged / waste material for recycling.
- Sweep or vacuum remaining material into a waste container for disposal.
- Use a light water spray to minimize dust generation.
- Waste material is not a hazardous waste. Dispose of in accordance with applicable local regulations.

## Precautions For Safe Handling And Use

- **General:** Keep material dry. Stack or store all panels flat. Panels are heavy and can fall over, causing serious injury or death. Use proper lifting methods and equipment. Do not move unless authorized.
- **Storage Temperature:** Should not be stored or used where temperatures exceed 55°C for extended periods or in areas of high humidity. Avoid exposure to direct sunlight.
- **Precautions and safe handling:** Safety glasses should be worn when handling and installing the product. Gloves or protective clothing are usually not necessary but may be desirable in certain situations. Scoring and snapping is the preferred method to be used when cutting the panels in order to reduce the potential for the creation of dust.
- **Waste disposal:** Not a hazardous material. Dispose of in accordance with local, state, and federal regulations.
- **Transportation Data:** Mada Ceiling Tiles are not hazardous for transportation.



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## Exposure Controls Measures / Personal Protection

Exposure Guidelines Component	OSHA PEL (mg/m <sup>3</sup> )		ACGIH TLV (mg/m <sup>3</sup> )	
	Total Dust (T)	Respirable Dust (R)	Total Dust (T)	Respirable Dust (R)
Calcium Sulfate Dihydrate (Gypsum)	15	5	10	NE
Crystalline Silica (Quartz)	NE	5	NE	0.025
Cellulose (Paper Fiber)	15	5	10	NE
Proprietary Additives	NE	NE	NE	NE

NE: Not Established

### Engineering Controls

- **Work/Hygiene Practices:** Scoring and snapping is the preferred method for cutting panels to minimize dust. Sawing, drilling or machining will produce dust.
- **Ventilation:** Provide local and general exhaust ventilation to maintain a dust level below the PEL/TLV. Utilize wet methods, when appropriate, to reduce generation of dust.

### Personal Protective Equipment

- **Skin Protection:** Gloves or protective clothing are usually not necessary but may be desirable in certain situations.
- **Eye Protection:** Wear safety glasses with side shields or goggles. Do not wear contact lenses in dusty environments.
- **Respiratory Protection:** Not required for normal handling and use of product. However, the wearing of approved breathing protection may be necessary for exposure to dust generated from snapping, sawing, or remanufacturing this product. Data presented is for the major component of this product: Gypsum (calcium sulfate dihydrate).

## Physical / Chemical Characteristics

- **Appearance:** White, chalky material between face and back paper(s).
- **Odor:** No Odor.
- **Physical State:** Solid.
- **Boiling Point:** Not Applicable.
- **Specific Gravity:** 2.2 – 2.4 g / cm<sup>3</sup>.
- **Vapour Pressure (MM OF Mercury):** Not Applicable.
- **Vapour Density (Air = 1):** Not Applicable.
- **Evaporation Rate:** Not Applicable.
- **Solubility in H<sub>2</sub>O:** 0.241 g / 100 cm<sup>3</sup>. PVC and PET Metalized films are non soluble.

## Reactivity Data

- **Stability:** Product is stable.
- **Conditions to Avoid:** Reaction with strong acids will generate carbon dioxide.
- **Incompatible Materials:** None Known.
- **Hazardous Polymerization:** Does not occur.
- **Hazardous Decomposition:** Above 1450°C gypsum could produce SO<sub>2</sub> and CaO. Polyvinyl Chloride causes release chlorine gas and carbon dioxide (CO<sub>2</sub>).



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## Toxicological Information

### Human Data

There is no information on toxicokinetics, metabolism and distribution.

There have been reports of irritation to mucus membranes of the eyes and respiratory tract upon acute exposure to dusts in excess of the recommended limits.

Chronic exposure to crystalline silica (a naturally occurring contaminant in gypsum) in the respirable size has been shown to cause silicosis, a debilitating lung disease.

In addition, the International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1.

The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen.

OSHA does not regulate crystalline silica as a human carcinogen. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted during gypsum panel installation utilizing recommended procedures.

### Animal Data

The acute oral toxicity study [OECD TG 420, Fixed dose procedure] of calcium sulfate dihydrate showed that this chemical did not cause any changes even at 2,000 mg/kg b.w. Therefore, the oral LD50 value was more than 2,000-mg / kg b.w. for female rats (Sprague-Dawley).

Calcium sulfate, dihydrate was not irritating to the skin of rabbits at 1, 24, 48 and 72 hours after removal of test patches [OECD TG 404].

There is no indication of skin sensitization in guinea pigs [OECD TG 406]. In vivo and In vitro studies for mutagenicity were negative.

Reproduction/Developmental Toxicity Screening Tests were negative.

## Ecological Information

This product does not present an ecological hazard to the environment.

- **Ecotoxicological Information:** Toxicity studies performed with fish, aquatic invertebrates and aquatic plants showed no toxic effect.
- **Environmental Fate:** Gypsum is a naturally occurring mineral. Biodegradation and/or bioaccumulation potential is not applicable.

## Disposal Considerations

- Dispose of according to Local and Provincial Environmental Regulations.
- Recycle if possible.

## Transportation Information

- This product is not a hazardous material.
- ICAO / IATA / IMO: Not applicable.

## Regulatory Information

There are no local regulatory information available for Gypsum Ceiling Tiles. However, relevant international standards like OSHA may be considered. Details of such International Standards are:

- OSHA Hazard Communication Rule, 29 CFR 1910.1200: Dust and Potential respirable crystalline silica generated during product use may be hazardous.
- CERCLA/SUPERFUND, 40 CFR 302: Not listed.
- SARA Title III Sections 302 / 304 / 311 / 312 / 313 Hazard Category: Not Listed.
- Toxic Substance Control Act (TSCA): This product complies with the TSCA Inventory requirements.



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## Other Information

### Key/Legend

ACGIH American Conference of Governmental Industrial Hygienists.

CAS Chemical Abstract Services Number.

CFR Code of Federal Regulations.

DOT Department of Transportation.

EPA Environmental Protection Agency.

HEPA High Efficiency Particulate Air.

HMIS Hazardous Material Identification System.

IARC International Agency for Research on Cancer.

IATA International Air Transport Association.

ICAO International Civil Aviation Organization.

IMO International Maritime Organization.

NIOSH National Institute for Occupational Safety and Health.

NFPA National Fire Protection Association.

NTP National Toxicology Program.

OSHA Occupational Safety and Health Administration.

PEL Permissible Exposure Limit.

PPE Personal Protective Equipment.

TLV Threshold Limit Value.

TSCA Toxic Substance Control Act.

TWA Time Weighted Average.

WHMIS Workplace Hazardous Materials Information System.

The information contained in this Safety Data Sheet is based on the current state of knowledge and current state of legislation. It provides guidance on Health Safety and Environmental aspects of the product, and should not be taken as a guarantee of technical performance or suitability for particular applications.

#### Disclaimer of Liability:

The information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable local laws and regulations. Mada Gypsum Company and its subsidiaries make no warranty of any kind, expressed or implied, concerning the accuracy or completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded.

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**Effective Date:** 01-06-2022.

**Prepared by:** Mada Gypsum Company.