



# WATANI MC30

CALCIUM SULFATE DIHYDRATE (CASO<sub>4</sub>·2H<sub>2</sub>O)

Together, We Build Gypsum Excellence

## DESCRIPTION

Watani MC 30 is a premium gypsum casting powder designed for precision molding and ceramic casting applications requiring high strength, smooth finish, and controlled setting. It offers excellent mold reproduction, dimensional stability, and a balanced setting time suitable for both manual and machine casting. With enhanced density and surface hardness, it ensures durability, consistency, and superior performance in ceramic, art, and technical casting uses.

## KEY FEATURES

- 100- 120 casting cycles (premium grade due to mixed gypsum and moderate setting time).
- High mechanical strength and durability for precision molds.
- Excellent dimensional stability for consistent mold reproduction.
- Easy to mix and apply, with controlled workability.
- Optimized setting time for manual and machine casting operations.
- Superior surface hardness and smooth finish.

## TYPICAL APPLICATIONS

- Ceramic mold and sanitary ware casting.
- Industrial and technical plaster molds.

## APPEARANCE

Supplied in 25 kg PP bags

## STANDARDS

ASTM C59 / C59M  
BS EN 13279-1  
ISO 9001:2015 Quality Management



Phone  
+966 11 512 2189  
Email  
info@w-gypsum.com

Address  
Head Office: Saudi Arabia, Riyadh  
Tahliah Street, Motoon North Building  
Floor No 1, Office N101  
Website  
www.w-gypsum.net



# PRODUCT SPECIFICATION

SPECS	VALUE	ASTM STANDARD C472/471	BS EN STANDARD 13279
CHEMICAL COMPOSITION	CASO <sub>4</sub> ·½H <sub>2</sub> O	—	—
INSOLUBLE RESIDUE ON SIEVES 60MM	% 2 . 1 - 1	—	—
FINESSE ON 150 MM	0%	0-0.3	—
RESISTANCE TO COMPRESSION	≥ 150 KG/ CM2	>12	>6
RESISTANCE TO BENDING	≥ 60 KG/CM2	—	>1
BULK DENSITY	900 - 1100 KG/M	—	—
WATER/GYPSUM ATIO	% 70- 68	VICAT METHOD	METHOD (4.3.2)
INITIAL SETTING TIME	12-18 MINUTES	—	KNIFE METHOD (4.4.1)
FINAL SETTING TIME	25-32 MINUTES	—	KNIFE METHOD (4.4.1)
FLUIDITY	200 - 220 CM	—	BY DISPERSAL METHOD (4-3-2)
WATER ABSORPTION	—	—	% 40 - 30

## MIXING GUIDELINES

### 1. Mixing Ratio

The gypsum-to-water ratio must strictly follow the values indicated in the Technical Data Sheet (TDS). Any deviation will significantly influence the mold's physical and functional properties such as porosity, absorption rate, mechanical strength, and setting time .

### 2. Water Specifications

Use only clean, potable water. The presence of organic impurities, dissolved salts, or elevated sulfate concentration accelerates setting reactions and negatively impacts the consistency and durability of the mold.

### 3. Soaking / Slurry Preparation

After charging gypsum into the pre-measured water, allow a soaking time of 1-2 minutes. This promotes proper wetting of particles, reduces entrapped air, and ensures efficient dissolution and hydration prior to agitation.

### 4. Mixing Process

- Employ a mechanical mixer operating at low rotational speed (≤ 400 rpm).
- Avoid high shear or turbulent mixing, as it induces air entrapment and non-uniform crystal growth, resulting in heterogeneous microstructure and lower mold performance.
- Minimum mixing duration: 1 minute to obtain a homogenous slurry with optimal rheological behavior.



Phone  
+966 11 512 2189  
Email  
info@w-gypsum.com

Address  
Head Office: Saudi Arabia, Riyadh  
Tahliah Street, Motoon North Building  
Floor No 1,Office N101  
Website  
www.w-gypsum.net



## STORAGE INSTRUCTIONS

**Packaging:** WATANI C must be stored in its **original, sealed packaging** to maintain its **integrity** and prevent contamination.

- **Ground Contact:** Avoid **direct contact with the floor**; use pallets or elevated platforms to protect the product from **moisture** and **dampness**.
- **Environmental Conditions:** Store in a **dry, well-ventilated area**, away from sources of **humidity, water, or direct sunlight**.

## SHELF LIFE

The product retains its **optimal properties** for up to **12 months** from the **production date** indicated on the packaging.



**Phone**  
+966 11 512 2189  
**Email**  
[info@w-gypsum.com](mailto:info@w-gypsum.com)

**Address**  
Head Office: Saudi Arabia, Riyadh  
Tahliah Street, Motoon North Building  
Floor No 1, Office N101  
**Website**  
[www.w-gypsum.net](http://www.w-gypsum.net)

