



گچ رضا
REZA PLASTER

تولید کننده :

گچ سفید

گچ خوشکار

گچ خاکی



Reza Gypsum

Producing:

White Gypsum

Undersurface soil gypsum (Khoshkar)

Soil Gypsum



Robat Sefid Gypsum Cooperative Company with the brand name of Reza Gypsum was purchased in 1999 as a semi-closed company by the founder of Iranian Gypsum Industry, Mr. Seyed Bagher Oraee . With the transfer of the mentioned unit to Mr. Amir Houshang Oraee and with his new attitude while solving many problems and also carrying out major repairs, the production capacity of the factory increased from 50 tons per day to 1000 tons per day in 2003.

The factory development has also been on the agenda since 2004. The opening of phases 4 and 5 of the factory, made it possible for the company, to produce undersurface soil gypsum (khoshkar) and distinguished soil gypsum and increase distinguished white gypsum production capacity to 1000 tons per day in the factory, which makes the total production capacity of the factory 2,000 tons per day.

Based on the high experience in the production of gypsum, the use of high quality raw materials, modern and advanced machineries and equipment and the use of committed and specialized forces, has made Reza Gypsum products of very high quality, which results in meeting a significant portion of gypsum needs in the provinces through the country. It also has market portion in different countries and also has a large portion in the gypsum market of neighboring countries such as Afghanistan, Turkmenistan and Armenia.

It is noteworthy to stipulate that the managers of Reza Gypsum Company have also considered plans for the development of the factory, such as: the production of micronized gypsum, setting up a production line for gypsum walls, and launching a production line for a drywall (Phase 6).

Products of the company:

- Reza Distinguished White Gypsum
- Reza Distinguished Undersurface Soil Gypsum (Khoshkar)
- Reza Distinguished Soil Gypsum

Reza Distinguished White Gypsum

1. Consumptions:

Building plaster, making plaster work frames for interior decoration, and sculpture

2. Technical specifications' table

(Technical specifications of Undersurface Soil Gypsum and White Gypsum)

(According to National Standard 12015-1)

Test Type	Test Description	White Gypsum Standard Level		White Gypsum		Under-Surface Gypsum Standard		Under-Surface Gypsum		
				Minimum	Maximum			Minimum	Maximum	
Chemical Test	% SO ₃	Minimum	30	49	56	Minimum	30	40	50	
	%CASO ₄	Minimum	50	83	95	Minimum	50	70	85	
Physical Test	Remained Percentage on Mesh 1.18mm	Maximum	1.5	0	0.5	Maximum	10	0	3	
	Hardening Time(min)	Primary	Bet.7-12 min		7	12	Bet.7-12 min		7	12
		Secondary	Max 30 min		19	30	Max 30 min		18	30
	Comprehensive Strength (N.mm ²)	Minimum	6	6	15	Minimum	6	6	10	
	Bending Strength (N.mm ²)	Minimum	2	2	7	Minimum	2	2	5	

3. Advantages of Reza Distinguished White Gypsum:

- Very good granulation (softness of particles and the absence of impurities that significantly increase the quality of plastering)
- Proper setting time that in addition to preventing the waste of materials increases the speed of plastering
- Creating high resistance in the final product due to high quality Gypsum
- The lightness of the final product due to the high quality of gypsum and also the high quality of baking

Distinguished Undersurface Soil Gypsum (Khoshkar)

1. Consumptions:

Mortar for floor arch, indoor screeding, 5 cm and 10 cm bricking up, ceiling and wall lining

2. Technical specifications' table

Test type	Test description		Undersurface gypsum standard limit		Distinguished Undersurface Soil Gypsum (Khoshkar)	
					Minimum	Maximum
Chemical test	So ₃ %		Minimum	30	40	50
	CaSO ₄ %		Minimum	50	70	85
Physical test	Remaining percentage on mesh 1.18 mm		Maximum	10	0	3
	Setting time (min)	Primary	Between 7 to 12 min		7	12
		Secondary	Max. 30 min		18	30
	Compressive strength(N.mm ²)		Minimum	6	6	10
	Bending strength (N.mm ²)		Minimum	2	2	5

3. Advantages of Reza Distinguished Undersurface Soil Gypsum (Khoshkar):

- Very good granulation (softness of particles and the absence of impurities that significantly increase the quality of plastering)
- Proper setting time that in addition to preventing the waste of materials increases the speed of plastering
- Creating high resistance in the final product due to high quality Gypsum
- The lightness of the final product due to the high quality of gypsum and also the high quality of baking



Reza Distinguished Soil Gypsum

1. Consumptions: ceiling and wall lining
2. Technical specifications' table

Test type	Test description		Undersurface gypsum standard limit		Distinguished Undersurface Soil Gypsum (Khoshkar)	
					Minimum	Maximum
Chemical test	So ₃ %		Minimum	30	40	47
	CaSO ₄ %		Minimum	50	70	80
Physical test	Remaining percentage on mesh 1.18 mm		Maximum	10	0	4
	Setting time (min)	Primary	Between 7 to 12 min		8	12
		Secondary	Max. 30 min		30	20
	Compressive strength(N.mm ²)		Minimum	6	6	9
	Bending strength (N.mm ²)		Minimum	2	2	5

Micronized Gypsum:

Micronized Gypsum Powder, as shown by its name, has a micrometer granulation and the gypsum is sieved.

Micronized gypsum is a type of construction gypsum with high-mesh used to perform the final stages of plastering (finishing). After the production of regular gypsum, gypsum enters a new stage for milling and its granulation changes and regular gypsum becomes micronized gypsum.

The name of this gypsum is derived from its particle size, which is produced and packaged in granules of 175 microns and less. This product is much more practical than regular gypsums for plastering.

The main production base of this product is the same plastering gypsum. The main difference between micronized plastering gypsum and regular plastering gypsum is in its granulation, so that the granulation of this product is 2 to 2.5 times lower than regular plastering gypsum, and this product offers a better level of plastering surface.

1. Consumptions:

Plastering walls, columns, ceilings and other parts of construction and also, used for plaster works

The most important uses of micronized gypsum are as follows:

- Plastering interior walls and plastering in the form of finishing plaster
- Plaster works and decorative plastering
- Raw material for the production of polymer and composite plasters
- Sculpture
- Molding – casting
- Production of industrial products such as sanitary porcelain



Mesh granulation 200

Compressive strength 9N/mm²

Bending strength 4N/mm²

The curing time (initial setting) is 6 to 7 minutes - this is the drying time for working at normal temperature (about 25 degrees Celsius).

Curing time (final / secondary setting) 12 to 14 minutes - this is the drying time for working at normal ambient temperature (about 25 ° C).

- It is more durable than regular types of regular white gypsum.

3- Production method

The production method of this product is fully similar to white gypsum. The only difference in the production line of this product compared to the white gypsum is the presence of a device called “separator” in its production line.

Retailers of constructional materials, construction companies and plasterers in the market usually know this product as plastering gypsum or double-meshed gypsum (of course, meshes and sieves were old technologies used in the production line of gypsum factories).

This is due to the fact that due to its calibration, gypsum grains can pass through its blades to a certain extent and other grains are returned to the mill as coarse particles for abrasion and re-grinding.

The separator blades have a certain distance from its body and the shorter distance results in the finer grain size of the final product (soft). Separators are made in two types, dynamic and static, each of which has its own type of function. Depending on the required granulation, micronized powders with a granulation of 1 to 0.002 mm with a mesh of 18 to 3500 can be produced using different types of separators.

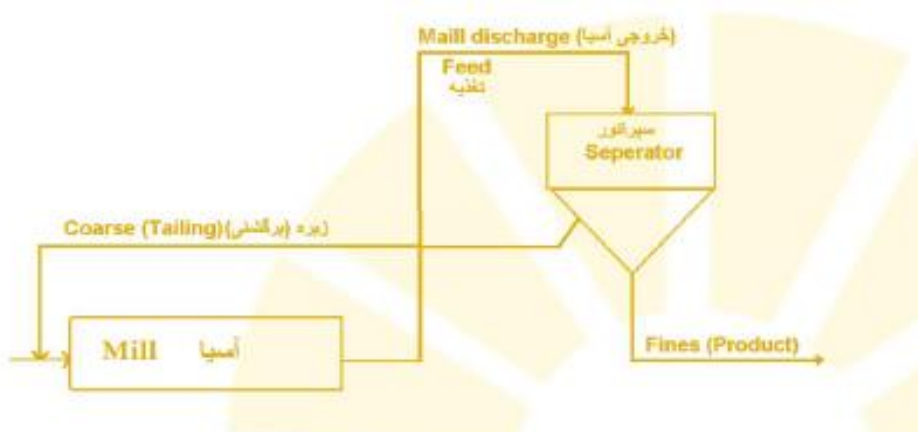
In the gypsum industry, meshes bearing the size of 200 to 300 are commonly known as micronized gypsum.

In the following table, the types of granulation and mesh are provided.

Mesh size	Mesh hole size in millimeters	Size in microns
18	1	
20	0/850	μ 850
25	0/710	μ 710
30	0/600	μ 600
35	0/500	μ 500
40	0/425	μ 425
45	0/355	μ 355
50	0/300	μ 300
60	0/250	μ 250
70	0/212	μ 212
80	0/180	μ 180
100	0/150	μ 150
120	0/125	μ 1250
80	0/180	μ 180
100	/150	μ 150
120	0/125	μ 125
140	0/106	μ 106
170	0/090	μ 90
200	0/075	μ 75
230	0/062	μ 62
270	0/053	μ 53
325	0/045	μ 45
400	0/038	μ 38
450	0/032	μ 32
500	0/025	μ 25
625	0/020	μ 20
800	0/015	μ 15
1500	0/008	μ 8
2500	0/005	μ 5
3500	0/002 ^c	μ 2 ^c

According to the standard Mesh 200, the final product of the separator should not have a grain size larger than 0.075 mm or 75 microns so that this product can be classified in the range of Mesh 200.

The general principles of separator operation can be seen in the following image:



4. Method of storage and maintenance of micronized gypsum powder:

Toward maintaining this product in standard conditions, the product must be placed on plastic or wooden pallets. It is recommended to store a maximum of 10 bags on top of one pallet. If the pallets are stored in a closed environment that does not have standard ventilation, they should be at least one meter away from the walls and at a distance from each other so that air can flow between the plasters. If the products are stored in humid and wet areas, it is better to use the products in a shorter period of time and not to store them for more than 2 months.

Reza Gypsum

Tel: +98(51)38761596

Fax: +98(51)38790386

Email: rezagypsum@gmail.com

Web: www.rezagypsum.com

Address: No. 58, Hashemieh 30th St., Hashemieh Blvd., Mashhad

Factory Address: Robat Sefid Village, 75th km of Mashhad-Torbateheydarieh Road, Mashhad