

marketing Group

Sadra



Gilsonite

Gilsonite is pure hydrocarbon with a melting point of 160 to 220 Celsius degrees found in bitumen mines, and is in fact, hardened crude oil. Gilsonite can be easily combined with crude oil due to its common oil base. Gilsonite is found in underground mines as a hard, black substance with a shining surface, often as a dark brown or black.



The presence of nitrogenous compounds in Gilsonite makes it highly adhesive and increases its resistance to oxidation as well. Studies show that adding 5 to 15% gilsonite to tar significantly increases its hardness and deformation resistance, along with a significant effect on its viscosity and elasticity.



Gilsonite analysis is performed in two physical and chemical forms as well as destructive and non-destructive methods. Through the XRF and XRG tests, elements such as softening temperature, the amount of sulfur and harmful elements, softness and hardness, carbon content and humidity are examined.





Sadra Trading Company takes gilsonite samples from different mines to its factories and then checks the quality.

After quality approval, gilsonite is sent in larger quantities to the processing unit in order to provide products according to different customer needs.

And finally, the products are transferred to the packaging hall to be packaged and delivered based on different customer desires.

Gilsonite granulation is done in different sizes ranging from 10 to 600 mesh. 10 to 100 mesh gilsonite is produced with a hammer mill; for 100 to 400 mesh gilsonite, Raymond roller mill or ball mill are required, and for 400 to 600 mesh gilsonite, jet mill is used. The usual size that is welcomed by customers is 200 mesh.

In addition to micronized powder with a diameter of 80 to 400 mesh, Sadra Trading Company produces lumpy gilsonite with zero to 25% ash content and granular gilsonite with a diameter of 30 to 40 mesh, depending on the customers' requests.

Gilsonite Applications

Oil Industry

There are many benefits to adding gilsonite to drilling mud; it increases the strength of the oil well wall, provides high resistance to dissolution with oil, prevents pellets or agglomerations of rocky soil compounds, and polishes the surfaces of drilling wells by removing excess mud and sludge.



Asphalt and road construction

The presence of sulfur compounds in gilsonite makes asphalt more durable, and reduces the problems caused by heavy traffic, such as wheel tracks. Gilsonite is widely used in hot asphalt mixtures and, it prevents deformation in hot or humid weather. Adding gilsonite to the asphalt reduces the road surface thickness by up to 20%.



Casting

Gilsonite can be used as an additive for cast sand to add a strong adhesive quality to it. Gilsonite is also able to make the mold easier to release.

Chemicals

One of the main applications of gilsonite is its use in the production of adhesives and sealants. In combination with other chemicals, gilsonite can be used in the production of various products such as, wood, fire retardant materials, tire, ceramics, etc.

Paint and ink industry

Black and brown pigments are extracted from gilsonite, which are used in the production of:

- Printer ink
- Black and viscous ink
- Asphalt black paints
- Polished oils
- Covering metal structures such as aircraft and ships
- Tar coating of gas and sewage pipes
- Use in bitumen-based paints (increases color fastness against ultraviolet)



Packaging

Depending on customers' requests, various types of packaging with the following specifications can be provided:

- Multilayer laminated bags 25 kg \pm 5%
- Multilayer paper bags (kraft) 25 kg \pm 5%
- Multilayer sacks 25 kg \pm 5%
- 1 Ton jumbo bags

All of the above products can be supplied in shredded, strapped and palletized packages depending on the customer's request.



