

Gilsonite



Iran is the biggest manufacturer and provider of high quality natural asphalt (Gilsonite) in the world.



Gilsonite in Asphalt & Bitumen

Gilsonite Natural Asphalt, Natural Bitumen, Hard Asphalt or Hard Asphaltum is used as a performance-enhancing agent for asphalt mixes. Gilsonite-modified paving mixes achieve higher PG grades and incorporate perfectly into the asphalt blend with no need for high shear milling as is the case with many other modifiers. Gilsonite can partially or totally replace, or complement, the use of SBS polymers in modified asphalts at a fraction of the cost.

Gilsonite-modified asphalts have higher stability, reduced deformation, reduced temperature susceptibility and increased resistance to water stripping than non-modified asphalts. Gilsonite is also used to make both solvent-based and emulsion pavement sealers with superior appearance and weathering properties.

Gilsonite in Oil & Gas

Gilsonite is used in drilling mud fluids and oil well cementing. Gilsonite, in a range of softening points and particle sizes, is a standard ingredient in oil-based drilling muds used in shales and other difficult geological formations. The addition of specially-treated Gilsonite to water-based drilling fluids helps minimize hole washout by stabilizing troublesome shales, and seals off highly permeable sands while reducing torque and drag. The addition of Gilsonite to oil well cements reduces slurry weight without loss of compressive strength and acts as an effective bridging and plugging agent to seal fractures in weak formations while cementing. also Gilsonite use in Mud drilling according to FLC " Filtrate Loss Control " or " Fluid Loss Control " in oil base mud .

Gilsonite in Inks and Paints

Gilsonite Resin is widely used as the primary carbon black wetting agent for black news inks and headset and gravure inks. Iranian Gilsonite Resin competes advantageously with petroleum-based hydrocarbon resins, phenolic resins and metal resinates, all of which it can complement or replace to various degrees. Various concentrations of Iranian Gilsonite Resin are used to manufacture law-rub-off news inks with superior gloss and tack properties. Special grades of Gilsonite called Selects are also standard ingredients in black ink formulations and are used as additives in asphaltic paints and varnishes. For Paint , If added to asphaltic paints and varnishes, Gilsonite's unique qualities improve their roughness, gloss and chemical and weather resistance. Printing Inks, Gilsonite is an important cost-effective ingredients in the manufacture of high quality vehicles for dark printing inks.

Gilsonite in Foundry

Gilsonite is combined with coal and other ingredients as an additive in foundry sands to insure the quality of the molded part by improving mold release and the overall finish of metal castings.

Gilsonite in Chemical

Gilsonite combines with many other chemicals and materials that take advantage of its unique physical and chemical properties. Binder and coating applications in metallurgical, wood product, refractory and other industries further demonstrate the versatility and usefulness of this remarkable material. Gilsonite has many industrial applications, including metal alloy processing, refractory, steel desulfurization, friction products, wood products, waterproof pipe coatings, and adhesives. It is a non-toxic, non-carcinogenic alternative to coal tar pitch as well as an economical alternative to mineral rubber. Gilsonite is used as a binder and mixing agent in steel desulfurization products. It has consistent volatiles that promote mixing of the other desulfurization chemicals like magnesium and hydrated lime. It will also add carbon content to the steel and will provide a reductive atmosphere as it oxidizes at high temperatures.

Gilsonite is used to make waterproof coatings for water pipes. It is a natural non-toxic resin with excellent adhesion properties. A corrosion-resistant, chemically inert pipe coating can be made from Gilsonite.

The wood products industry also uses Gilsonite as a binder. It has excellent waterproofing and weather resistant properties. Because Gilsonite is a hard resin it will make a very hard particleboard.

For more information, please [contact](#) Hamid Asadi.