

## GILSONITE

Generic Data	
Product Name	Natural Asphalt
Chemical Name	Gilsonite
CAS Number	12002-43-6
Main Use	Additive for Asphalt and Bituminous Waterproofing Compounds
Registration Number	N/A (pre-registered as 601-660-8 on 30/11/2008)
Index 67/548/EEC	N/A
REACH	Not subject to REACH
HS Code	27.14.90.00

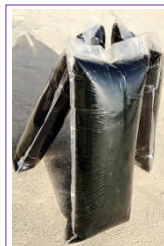
**Description:** Gilsonite is mined in underground shafts and resembles shiny, black substance similar in appearance as the mineral Obsidian. It is brittle and usually micronized into dark brown powder. It is mainly composed of asphaltenes; thus, Gilsonite is classified as a Natural Asphalt.

**Applications and Use:** as additive in bituminous compounds. Thanks to the identical chemical composition (predominantly asphaltenes) the product is easily blended with the bitumen without altering its characteristics, but raising the softening point and decreasing the penetration. The final product will have a greater resistance to wear and pressure. Thanks to its lower price compared to the bitumen, it also brings an economic benefit without detriment to quality. According to the data in our possession, the product can replace, depending on the type of bitumen used and the resistance to the cold of the final product, up to 1% of the content of SBS and up to 8% of bitumen content.

### Technical Specifications

TEST	Unit	min	max	Method
Ash	wt%	15	20	ASTM D-174
Solubility in CS <sub>2</sub>	wt%	85	95	ASTM-D4
Moisture	wt%	1	3	ASTM D-173
Volatiles	wt%	60	70	ASTM-D175
Fixed Carbon	wt%	20	30	ASTM-D172
Softening Point	°C	170	200	ASTM D-36
Flash Point	°C	350	420	Cleveland Open Cup
Specific Gravity	g/lt	1,01	1,10	ASTM-D3289
Particle Size	mesh	80	100	Tyler

**Packaging.** A) In 25 kg polyethylene bags, fusibile at 190°C, palletized o loaded in jumbo bags. B) 25 kg craft paper bags, palletized or loaded in jumbo bags. C) 25 kg Polypropilene bags, palletized or loaded in jumbo bags.



### Loading Table

Loading Table (in metric tons)	In 20' FCL		In 40' FCL		In Truck	
	From	To	From	To	From	To
Palletized	12	14	21	25	21	23
In Jumbo Bags	15	17	24	26		

**Physical/Chemical Specification**

<b>SOLUBILITY</b>		
<b>Chemical Group</b>	<b>Component</b>	<b>Soluble</b>
Aliphatic Hydrocarbons	VM&P Naphtha	YES
----	Mineral Spirits	YES
----	Solvents with KB	YES
Aromatic Hydrocarbons	All	YES
Alcohols	All	NO
Chlorinated Hydrocarbons	All	YES
Esters	Methyl Acetate	NO
----	Ethyl Acetate	Slight
----	n-Butyl Acetate	Slight
Glycols	All	NO
Glycol Ethers	All	NO
Glycol Ether Esters	All	NO
Ketones	Acetone	NO
----	MEK	NO
----	MIBK	NO
Other Solvents	Carbon Disulfide	YES
----	Carbon Tetrachloride	YES

<b>Adhesive Capacity</b>			
<b>Coating System</b>	<b>Adesivity</b>	<b>Coating System</b>	<b>Adesivity</b>
Natural rubber	FAIR	Ethylene/vinyl acetate	GOOD
Cellulose esters	POOR	SBS rubber	EXCELLENT
Phenolic	GOOD	Polychloroprene rubber	EXCELLENT
Resorcinol formaldehyde	FAIR	Nitrile rubber	FAIR
Urea formaldehyde	GOOD	Butyl rubber/polyisobutylene	GOOD
Melamine formaldehyde	GOOD	Silicone	GOOD
Alkyd	GOOD	Polyurethane	FAIR
Epoxy	FAIR	Vinyl ethers	GOOD
Polyurethane	FAIR	Resinates	GOOD
Acrylic	FAIR	Resin modified	EXCELLENT
Unsaturated polyester	FAIR	C9 aromatic	GOOD
Polyaromatic	GOOD	DCPD	EXCELLENT
Acrylic acid diester	POOR	Terpene	EXCELLENT
Polyvinyl acetate	FAIR	Terpene phenolic	GOOD
Polyvinyl alcohol	FAIR	Phenolic modified	GOOD
Polyvinyl chloride	GOOD	maleic-fumaric modified	EXCELLENT
Acrylic	FAIR	Alkyd	GOOD
Polyamide	POOR	Shellac	POOR
Phenoxy	POOR		

Standards ASTM D36-95 ed UNI EN 1426

**Miscellaneous:** For any other information please refer to MSDS

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