

Gilsonite® Information Bulletin

Gilsonite® Foundry Grade

Principal Applications

Foundry Sand Additive
Refractories
Ingot Mold Coating
Briquette or Pellet Binder

Typical Properties

Softening Point (ASTM E28-92)	160-182°C 320-360°F
Ash (ASTM D271-70 M)	0.5% 2.0% Maximum
Moisture (AGC Method)	0.5% 2.0% Maximum
Penetration (25°C, 100 gm, 5 sec.)	0
Color in Mass	Black
Flash Point (COC)	316°C; 600°F
Sulfur	0.3%
Specific Gravity	1.05
Fixed Carbon	18%
BTU per pound	18,000
Volatile Combustible Matter at 1900°F, ASTM D271-4	81%
Lustrous Carbon Content	35-38%
Coking Value	25-30%

Typical Elemental Analysis, Weight %

Carbon	85%
Hydrogen	10%
Nitrogen	3.0%
Oxygen	1.5%
Silicon, Nickel, & Trace Elements	0.3%

Typical Particle Sizing

% Retained (Cumulative)

	Super Coarse	Small Lump	Semi-Pulverized	Pulverized
4 mesh	<=.1	<=2		
10 mesh	>=5	<=3.0	<=0.5	
30 mesh				<=0.1
50 mesh				<=1.3
65 mesh	>=70	<=55.0	<=23	
100 mesh				<=8.5
150 mesh	>=90	<=77.0	<=58	
200 mesh				<=30.0

PRODUCT APPLICATION FOR FOUNDRY GRADE GILSONITE

Physical Sand properties with Gilsonite® resin are equal or superior to seacoal at significantly lower additive levels. Gilsonite improves sand density, water requirements and strength (green, dry, baked, and hot). Gas evolution curves show that Gilsonite volatilizes more rapidly than seacoal. Gilsonite has the same total volatiles as seacoal at one-third the additive level.

PACKAGING

Gilsonite Foundry Grade is available in 50 lb. and 25 kilo net multi-ply paper bags which may be palletized and stretch wrapped. It is also available in bulk loaded trucks, containers, and a variety of bulk bag sizes.

HEALTH & SAFETY

Gilsonite is a naturally occurring hydrocarbon. There is no known history of dermatitis, lung disease or other health problems associated with handling of Gilsonite as supplied. Dusts are subject to combustion. Normal precautions used with flammable materials apply.

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