



Texan Minerals and Chemicals LLC

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TECHNICAL DATA SHEET Ilmenite 56-58

CAS number: 1317-80-2

H S Code 2614001000

CHEMICAL ANALYSIS (XRF results available on request)

Chemicals (On dry basis, Primarily ICP)	Result %
TiO ₂	56-58
Al ₂ O ₃	Up to 0.6
SiO ₂	Up to 2.5
Cr ₂ O ₃	Up to 0.05
Fe ₂ O ₃ (on basis of Fe & FeO)	13 - 25
FeO	9 - 20
MnO	Up to 0.8
P ₂ O ₅	Up to 0.2
V ₂ O ₅	Up to 0.25
MgO	0.44
Nb ₂ O ₅	0.15
ZrO ₂	0.11
S	0.5
ZnO	0.026

PHYSICAL DESCRIPTION AND PROPERTIES

Minerals	Contents %	Item	Result
Ilmenite	No less than 94.5	Melting point	1365°C
Zircon	Up to 0.5	Density	4150-4250 kg/m ³
Siderite	Up to 2	Bulk density	2150 - 2350 kg/m ³
Iron Hydrooxysl	Up to 0.5	Average Particle Size	300 Microns
Markazite (Free)	Up to 1	Angle of Natural Slope	32 degree
Markazite with Ilmenite	Up to 2	Hardness	5
Leukoxene	Up to 1	Moisture	1.5 %
Apatite	Up to 0.1	In a dry state, free-flowing sand is black in color with a metallic sheen. The shape of the grains is irregularly rounded. It is not soluble in water and no fire hazard.	
Quartz	Up to 2		

SIZE DISTRIBUTION

Sieve Distribution %				Sieve Distribution %			
Micron	Mesh	retained %	Cum. Retained %	Micron	Mesh	retained %	Cum. Retained %
2000	10	0.05	0.05	210	70	9.56	63.26
841	20	2.63	2.67	177	80	7.38	70.64
595	30	7.43	10.10	149	100	9.75	80.39
400	40	13.18	23.28	125	120	8.05	88.44
297	50	19.11	42.39	105	140	5.49	93.93
250	60	11.31	53.70	88	170 and 170+	6.07	100.0

End use : production of synthetic rutile, titanium pigment dioxide, welding electrodes, sponge titanium, metal titanium, in steelmaking production.

Shipment : in bulk in rail cars or in sea-shipping 20-foot containers.