

Kardoost Chrome Ore

Kardoost Company can supply any grade of Chromite ore of Iran.

What is Chromite?

Chromite is an oxide mineral composed of chromium, iron and oxygen (FeCr_2O_4).

It is a dark gray to black in color with a metallic to submetallic luster and a high specific gravity. Chromite is important because it is the only economic ore of chromium, an essential element for a wide variety of metal, chemical and manufactured products. Many other minerals contain chromium, but none of them are found in deposits that can be economically mined to produce chromium

Physical Properties

Density	4.56 g/cm ³
Bulk Density	2.73 g/cm ³
Refractoriness	>1800°C
pH	7.5 - 9.5

Chromite sand specification

Chemical analysis	% (typical)
Cr_2O_3	46.0 min
SiO_2	1.0 max
Fe_2O_3	26.0
CaO	0.15
Al_2O_3	15.0
MgO	9.80



Chromite grades:

1. High chrome- $\text{Cr}_2\text{O}_3 > 46\%$ (46-55) - use in Metallurgy
2. High iron - $40 < \text{Cr}_2\text{O}_3 < 46$ - use in chemical industry
3. High aluminum - $33 < \text{Cr}_2\text{O}_3 < 38$ - use in refractory industry

Chromite usages

Main usages: Metallurgy-chemical industry-refractory industry

Chromium is an important ingredient in steel; it gives this metal increased hardness and toughness, and it helps it reduce chemical erosion over time. Chromium is also vital in the aerospace industry because it is used to anodize the aluminum that is used to build aircraft and related equipment. These aluminum alloys made with chromium are incredibly heat resistant, making them ideal for use in jet engines. Chromite is an important refractory material, although production for this purpose is only approximately 1% of world production of chromite.

SGS RESULTS FOR CHROME ORE

Chemical Analysis (On Dry Basis):

One composite sample with SGS seal No. 72111 was sent to a non SGS laboratory to be tested and following result of tests was reported by the lab (test method ASTM C 572 & Wet Chemistry).

Test Items	Result	Test Items	Result
Cr ₂ O ₃ (%)	36.74	Al ₂ O ₃ (%)	6.88
Cr/Fe	2.40	P (%)	<0.09
Fe total (%)	10.48	S (%)	<0.09
SiO ₂ (%)	14.20	MgO	21.50

Chemical Analysis (On Dry Basis):

One composite sample with SGS seal No. 72111 was sent to a non SGS laboratory to be tested and following result of tests was reported by the lab (test method ASTM C 572 & Wet Chemistry).

Test Items	Result	Test Items	Result
Cr ₂ O ₃ (%)	36.74	Al ₂ O ₃ (%)	6.88
Cr/Fe	2.40	P (%)	<0.09
Fe total (%)	10.48	S (%)	<0.09
SiO ₂ (%)	14.20	MgO	21.50

Chemical Analysis (On Dry Basis):

One composite sample with SGS seal No. 57863 was sent to a non SGS laboratory to be tested and following result of tests was reported by the lab (test method ASTM C 572 & Wet Chemistry).

Test Items	Result	Test Items	Result
Cr ₂ O ₃ (%)	40.45	Al ₂ O ₃ (%)	7.29
Cr/Fe	2.44	P (%)	<0.09
Fe total (%)	11.38	S (%)	<0.09
SiO ₂ (%)	10.44	MgO	18.90

Chemical Analysis (On Dry Basis):

One composite sample with SGS seal No. 61409 was sent to a non SGS laboratory to be tested and following result of tests was reported by the lab (test method ASTM C 572 & Wet Chemistry).

Test Items	Result	Test Items	Result
Cr ₂ O ₃ (%)	42.88	Al ₂ O ₃ (%)	7.20
Cr/Fe	2.89	P (%)	<0.09
Fe total (%)	10.16	S (%)	<0.09
SiO ₂ (%)	10.96	MgO	21.24

Chemical Analysis (On Dry Basis):

One composite sample with SGS seal No. 61409 was sent to a non SGS laboratory to be tested and following result of tests was reported by the lab (test method ASTM C 572 & Wet Chemistry).

Test Items	Result	Test Items	Result
Cr ₂ O ₃ (%)	42.88	Al ₂ O ₃ (%)	7.20
Cr/Fe	2.89	P (%)	<0.09
Fe total (%)	10.16	S (%)	<0.09
SiO ₂ (%)	10.96	MgO	21.24

Chemical Analysis (On Dry Basis):

One composite sample with SGS seal No. 58005 was sent to a non SGS laboratory to be tested and following result of tests was reported by the lab (test method ASTM C 572 & Wet Chemistry).

Test Items	Result	Test Items	Result
Cr ₂ O ₃ (%)	43.65	Al ₂ O ₃ (%)	10.68
Cr/Fe	3.19	P (%)	<0.09
Fe total (%)	9.38	S (%)	<0.09
SiO ₂ (%)	9.52	MgO	19.70

Chemical Analysis (On Dry Basis):

One composite sample with SGS seal No. 55972 was sent to a non SGS laboratory to be tested and following result of tests was reported by the lab (test method ASTM C 572).

Test Items	Result	Test Items	Result
Cr ₂ O ₃ (%)	47.10	Al ₂ O ₃ (%)	7.12
Cr/Fe	2.51	P (%)	<0.09
Fe total (%)	12.85	S (%)	<0.09
SiO ₂ (%)	6.04	MgO	17.11