



Chromite

Opta Minerals your source for Foundry Products:

Chromite
 Foundry Sands
 Cerabeads
 Green Sand Additives
 (Bentonite, Carbobond & Carsins)
 Olivine Sand
 Resin Coated Sands and
 Chemically Bonded Sands
 Riser Sleeves, FLux and
 Metal Filters
 Zircon

Contact Us

Our sales team is ready to help you to determine the right product for your job.
 For more information please call us:
 Toll-free: 888-689-6661
 Tel: 519-720-9694
 E-mail: info@optaminerals.com
 Visit: www.optaminerals.com

As the North American representative for a leading supplier of Chromite ore and sands in South Africa, Opta Mineral offers superior quality chromite sand to the steel, foundry and refractory industry.

At all stages of our supply processes stringent quality control measures are employed to assure that this critical mineral is on target with specification.

Chromite, as is indicated by its early crystallization, is resistant to the altering affects of high temperatures and pressures. These characteristics explain the use of chromite as a heat conductive foundry molding sand, which allows localized or general chilling of castings to improve their integrity.



ADVANTAGES OF CHROMITE

- High density,
- Good for chilling casting
- Prevent hot tears

TYPICAL USES

- Used to harden steel, to manufacture stainless steel and to form alloys
- Used in plating to produce a hard, beautiful surface and to prevent corrosion.
- Used by the aircraft and other industries for anodising aluminium
- The refractory industry uses chromite for forming molds and shapes, as it has a high melting point, moderate thermal expansion, and stable crystalline structure

TECHNICAL SPECIFICATIONS (IN %)

Symbol	Name	Percentage
Cr ₂ O ₃	Chromium Oxide	46.42
Fe ₂ O ₃	Iron Oxide	27.20

TECHNICAL SPECIFICATIONS (IN %)

Symbol	Name	Percentage
Al ₂ O ₃	(Aluminum Oxide)	14.80
MgO	(Magnesium Oxide)	9.85
SiO ₂ (total)	(Silicon Dioxide)	0.75
TiO ₂	(Titanium Oxide)	0.67
MnO	(Manganese Oxide)	0.23
CaO	(Calcium Oxide)	0.22
P ₂ O ₅	(Phosphorus Pentoxide)	0.05
Na ₂ O	(Sodium Oxide)	0.03
K ₂ O	(Potassium Oxide)	0.02
LOI	(Loss On Ignition)	0.15

CHARACTERISTICS

Colour:	Shiny black
Specific Gravity:	4.4
Bulk Density (loose)	163 lb/ft ³
Bulk Density (compacted)	181 lb/ft ³
Grain Shape	Sub-angular
Melting Point (°F)	3350 - 4000
Melting Point (°C)	1850 - 2200
Solubility	Negligible

PACKAGING

50 lb paper bags, 100 lb paper bags
 3000 lb Super Sacs
 Bulk (blower truck or rail hopper cars)