

REFINED STRENGTH

BHP BILLITON CHARGE CHROME



Chemical Analysis		GRADES:	Lump	Plasma	Small Lump	Granulated	Recovery	Fines
Component	General Specifications	all sizes in mm	150/100/80mmx10mm	150/100/80mmx10mm	10mmx3mm	35mmxdown	25mmx4mm	4mmxdown
Cr	49.0 - 54.0	all figures in %	50.0 - 52.0	52.0 - 54.0	49.0 min	50.0 - 52.0	49.0 min	46.0 min
C	6.0 - 9.0		8.0 max	9.0 max	9.0/8.0 max	8.0 max	8.0 max	8.0 max
Si	1.5 - 6.0		3.0/4.0/5.0 max	1.5/2.0 max	2.0/5.0 max	3.0/4.0/5.0 max	6.0 max	6.0 max
P	0.01/0.03 max		0.013-0.029 max	0.010/0.015 max	0.015/0.025 max	0.013-0.029 max	0.03 max	0.03 max
S	0.02/0.05 max		0.04-0.05 max	0.03 max	0.03/0.050 max	0.04-0.06 max	0.055 max	0.055 max
Fe	balance							
Trace Elements:	% Typical	Physical Properties:						
N	0.0136**	Bulk Density (t/m3)	3.6	3.6	3.7	3.1	3.7	3.9
O	0.0910**	Specific Gravity(H2O=1)	6.7	6.7	6.7	6.7	6.7	6.7
H	0.0005**	Particle size specifications:	oversize < 5% - 10mm < 10%	oversize < 5% - 10mm < 10%	+10mm < 5% - 3mm < 10%	+35mm < 5%	+25mm < 5% -4mm < 10%	+4mm < 5%
Mn	0.14-0.36*							
V	0.33*							
Co	0.055*							
Ti	0.22-0.55*							
Ni	0.18*							
Pb	0.0068**							
Sn	0.00235**							
Zn	0.0063**							
Cu	0.0060**							
Mo	0.0062**							
Nb	0.0007**							
Cd	0.0015**	Packaging Options:						
Sb	0.0041**	Bulk shipment						
W	0.0046**	Bulk-containerised						
Hg	-0.0001**	1 t bags						
Zr	0.0014**							
Ta	0.0056**	Properties of Charge Chrome:						
Bi	0.0069**	Melting Point:			1530 - 1570 C			
Ce	0.0764**	Liquidus Temperature:			1500 - 1520 C			
Al	0.050**	Solidus Temperature:						
Mg	0.0517**	Reactivity:			Charge Chrome reacts slowly with other reagents			
Ca	0.0035**	Properties of Chromium:						
B	0.0011**	Atomic Number:	24	Appearance:	silver/steel grey			
As	0.0024**	Atomic Mass:	51.996	Solubility in water:	negligible(<0.1%)			
K	0.0430**	Valency States:	3,4,6	Volatility:	not volatile			
		Melting Point:	1900 C	Odour:	none			
		Boiling Point:	2200 C					
		Specific Gravity:	7.14					

Charge Chrome is a carbon-saturated solid solution of predominantly chromium and iron carbides. Its main use an application is as a raw material for the manufacture of various grades of stainless steel and chromium-based alloys

Synonyms: IC3
 Commonly Used Symbol: MCFeCr
 Standards: ISO 9002
 CAS No.:

The typical specifications set out above are indicative only. Seller does not warrant compliance with the typical specifications and reserves the right to amend them at any time.

Information updated as of September 2008