

CHROMIUM (III)OXIDE

Chromium(III) oxide (or chrome oxide) CAS Number 1308-38-9. Molar mass 151.99 g/mol ,Density :5.22 g/cm³ , Melting point:2,435 °C (4,415 °F; 2,708 K),Boiling point:4,000 °C (7,230 °F; 4,270 K). It is an [inorganic compound](#) with the [formula Cr₂O₃](#). It is one of the principal oxides of [chromium](#) and is used as a Chromium Metal, refractory materials, Inorganic pigment and Grind material.

Refractory Grade

Used in the production of refractory materials for high-temperature environments, such as furnaces and kilns, due to its high melting point and chemical stability.

Refractory Grade

ITEMS	LIMITS	RESULTS
Cr ₂ O ₃ CONTENT%	≥99.00	99.41
MOISTURE%	≤0.20	0.06
WATER SOLUBLE MATTER%	≤0.50	0.25
RESIDUE 325%	≤0.30	0.07
HEXAVALENT CHROME (Cr6)+PPM	≤5	0
PH	5-8	7.50

PARTICLE SIZE ANALYSIS BY BT-9300H SYSTEM

Sample Name: Refractory Grade	Sample Owner: SPRUCEX LLC
Medium Name: water	Measure Dept: SPRUCEX LLC
Operator: Jessica	Test Date: 2024-11-03 Test Time: 09:55:10
Remark:	

D50: 3.69um	D[4, 3]: 4.37um	D[3, 2]: 3.49um	Obscuration: 29.05
SSA: 329.64m ² /kg	Matter Index: 2.520+0.10	Medium Index: 1.333	Span: 1.55
D0: 100.00um	D0: 100.00um	D0: 100.00um	D0: 100.00um
D0: 100.00um	D0: 100.00um	D0: 100.00um	D0: 100.00um

Diam um	Diff %	Cumulative %	Diam um	Diff %	Cumulative %	Diam um	Diff %	Cumulative %	Diam um	Diff %	Cumulative %
0.10 - 0.11	0	0	0.76 - 0.85	0	0	5.85 - 6.51	5.03	81.62	44.69 - 49.74	0	100
0.11 - 0.12	0	0	0.85 - 0.95	0	0	6.51 - 7.24	4.93	86.55	49.74 - 55.36	0	100
0.12 - 0.14	0	0	0.95 - 1.05	0	0	7.24 - 8.06	4.63	91.18	55.36 - 61.62	0	100
0.14 - 0.15	0	0	1.05 - 1.17	0	0	8.06 - 8.97	3.96	95.14	61.62 - 68.58	0	100
0.15 - 0.17	0	0	1.17 - 1.31	0	0	8.97 - 9.98	2.91	98.05	68.58 - 76.33	0	100
0.17 - 0.19	0	0	1.31 - 1.45	0	0	9.98 - 11.11	1.55	99.6	76.33 - 84.96	0	100
0.19 - 0.21	0	0	1.45 - 1.62	0.57	0.57	11.11 - 12.37	0.4	100	84.96 - 94.56	0	100
0.21 - 0.24	0	0	1.62 - 1.80	2.15	2.72	12.37 - 13.77	0	100	94.56 - 105.24	0	100
0.24 - 0.26	0	0	1.80 - 2.00	4.14	6.86	13.77 - 15.32	0	100	105.24 - 117.13	0	100
0.26 - 0.29	0	0	2.00 - 2.23	5.9	12.76	15.32 - 17.05	0	100	117.13 - 130.37	0	100
0.29 - 0.32	0	0	2.23 - 2.48	7.21	19.97	17.05 - 18.98	0	100	130.37 - 145.10	0	100
0.32 - 0.36	0	0	2.48 - 2.76	7.91	27.88	18.98 - 21.12	0	100	145.10 - 161.50	0	100
0.36 - 0.40	0	0	2.76 - 3.08	8.23	36.11	21.12 - 23.51	0	100	161.50 - 179.75	0	100
0.40 - 0.45	0	0	3.08 - 3.42	8.32	44.43	23.51 - 26.17	0	100	179.75 - 200.06	0	100
0.45 - 0.50	0	0	3.42 - 3.81	8	52.43	26.17 - 29.12	0	100	200.06 - 222.66	0	100
0.50 - 0.55	0	0	3.81 - 4.24	7.25	59.68	29.12 - 32.41	0	100	222.66 - 247.83	0	100
0.55 - 0.62	0	0	4.24 - 4.72	6.28	65.96	32.41 - 36.08	0	100	247.83 - 275.83	0	100
0.62 - 0.69	0	0	4.72 - 5.25	5.51	71.47	36.08 - 40.15	0	100	275.83 - 307.00	0	100
0.69 - 0.76	0	0	5.25 - 5.85	5.12	76.59	40.15 - 44.69	0	100	307.00 - 341.69	0	100



