

Cerox[®] Metal Melting Crucibles

Datasheet Code US: 1-14-30



The values given herein are typical average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Therefore, the data contained herein should not be used for specification purposes. Check with your Thermal Ceramics office to obtain current information. Thermal Ceramics is a trademark of The Morgan Crucible Company plc.

Physical Properties	Cerox 90V	Cerox 700	Cerox 730	Cerox FS-85V
Classification temperature rating, °F (°C)	3090 (1699)	3040 (1671)	3090 (1699)	2750 (1510)
Density, bulk, pcf (kg/m ³)	176 (2885)	185 (3045)	172 (2756)	109 (1747)
Apparent Porosity, %	20	17.5	19	22
MOR, psi (MPa)	2500 (17.2)	5086 (15.5)	1300 (8.91)	510 (3.5)
Coefficient of thermal expansion, in/in•°F x 10 ⁻⁶	4.1	4.9	3.7	3.2
Thermal Conductivity, BTU•in/hr•ft ² •°F (W/m•K)	16 (2.4)	24.2 (3.6)	–	10.6 (1.6)
Chemical Analysis, % weight basis after firing				
Alumina, Al ₂ O ₃	91	90	95	14
Silica, SiO ₂	8	10	3.5	85
Iron oxide, Fe ₂ O ₃	0.15	0.2	0.2	0.3
Titanium oxide, TiO ₂	0.1	0.1	0.9	0.7
Calcium oxide + Magnesium oxide, CaO + MgO	0.04	–	trace	0.15
Alkalies, as Na ₂ O + K ₂ O	0.15	trace	0.3	0.45

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Capacity lbs.	OD, in.	ID, in.	Height, in.	Wall, in.	Base, in.
25 lbs.	4.50	3.50	11.00	0.38	0.50
30 lbs.	5.75	5.00	9.75	0.38	0.50
40 lbs.	6.00	5.00	11.63	0.50	0.75
50 lbs.	6.50	5.50	11.00	0.50	0.63
65 lbs.	6.50	5.50	13.25	0.50	0.75
100 lbs.	8.13	7.13	13.25	0.50	0.50
100 lbs.	8.88	7.63	12.75	0.63	0.75
150 lbs.	9.50	8.00	13.75	0.75	1.00
150 lbs.	9.75	8.75	13.25	0.63	0.75
200 lbs.	10.63	8.88	15.00	0.88	1.00
250 lbs.	10.00	8.50	17.00	0.75	1.00
240 lbs.	10.63	9.13	16.00	0.75	1.00
230 lbs.	10.50	9.25	18.00	0.62	1.75
250 lbs.	10.75	9.00	20.00	0.87	1.25
300 lbs.	12.12	10.37	16.75	0.87	1.00
300 lbs.	12.25	11.00	16.50	0.75	0.75
300 lbs.	12.00	10.50	18.25	0.75	1.00
295 lbs.	11.75	10.50	19.00	0.63	1.00
400 lbs.	15.00	13.00	18.00	1.00	1.00
385 lbs.	13.50	12.00	20.00	0.75	1.00
430 lbs.	15.25	12.75	19.00	1.25	1.00
450 lbs.	15.00	13.00	19.75	1.00	1.25
500 lbs.	13.83	12.42	19.69	1.41	1.13
500 lbs.	14.50	13.13	19.50	0.69	1.00
600 lbs.	14.87	13.50	19.25	0.69	1.62
625 lbs.	12.67	11.29	30.00	0.69	1.25
600 lbs.	16.00	14.00	22.00	1.00	1.62
650 lbs.	15.50	13.50	23.00	1.00	1.00
700 lbs.	16.00	14.00	22.00	1.00	1.00
750 lbs.	14.50	12.75	27.0	0.87	1.13
800 lbs.	17.00	15.00	21.00	1.00	1.75
750 lbs.	16.00	14.75	23.25	0.63	1.25
1000 lbs.	16.50	14.50	25.00	1.00	1.50
1000 lbs.	15.50	13.50	29.00	1.00	1.00
1000 lbs.	18.50	16.00	26.00	1.25	1.50
1000 lbs.	18.27	16.27	26.00	1.00	1.50
800 lbs.	21.00	19.00	22.50	1.00	1.00
1300 lbs.	18.50	16.25	33.50	1.13	1.25
1200 lbs.	25.00	23.00	23.75	1.00	2.00
1800 lbs.	23.50	21.50	29.00	1.00	1.50
1500 lbs.	22.00	20.00	34.00	1.00	1.50
2000 lbs.	23.50	21.50	31.50	1.00	1.50
5000 lbs.	32.00	29.00	53.00	1.50	2.75