# Silica

# Silica Crucibles and Capsules

 $99.8\%~SiO_2.$  Can be used up to  $1050^\circ\text{C}$  continuously and  $1300^\circ\text{C}$  for short periods. Inert to most substances except alkalies and some metallic oxides. All products are glazed and translucent. All dimensions and capacities are nominal.

# Low Form Crucibles without lid

	Dia. x ht. mm	Cap. ml	
CX505-10	29 X 19	5	
CX505-14	38 x 19	10	
CX505-18	41 x 25	15	
CX505-22	47 x 28	25	
CX505-26	57 x 37	50	
CX505-30	67 x 45	80	
CX505-34	82 x 51	150	

# Lids for Low Form Crucibles CX505 only.

For crucibles	
CX505-10	
CX505-14	
CX505-18	
CX505-22	
CX505-26	
CX505-30	
CX505-34	
	For crucibles CX505-10 CX505-14 CX505-18 CX505-22 CX505-26 CX505-30 CX505-34

#### Tall Form Crucibles without lid

	Dia. x ht. mm	Cap. ml	
CX515-14	35 x 38	20	
CX515-18	43 x 39	30	
CX515-22	51 x 51	50	
CX515-26	76 x 81	200	

# Lids for Tall Form Crucibles CX515 only

	For crucibles	
CX517-14	CX515-14	
CX517-18	CX515-18	
CX517-22	CX515-22	
CX517-26	CX515-26	

	Dia. x ht. mm	Cap. ml	
Broad Base Cr	ucibles without l	id	
CX522-18	41 x 24	15	
CX522-22	48 x 27	25	
CX522-26	57 x 37	40	
Circular Capsu	les without lid		
CX532-10	40 x 15	10	
CX532-14	48 x 15	20	
CX532-26	56 x 28	45	
CX532-34	75 x 28	80	

# Rectangular Capsules, without lid

	L x W x H mm	Cap. ml	
CX552-10	60 x 28 x 12	10	
CX552-18	52 x 42 x 18	25	

# **Crucibles, coking**

CX582-1025 x 38mm, with projectionsCX582-1525 x 38mm, plainCX582-50Lid for CX582- coking cruciblesCX582-55Plunger for CX582- coking crucibles

# Note

Fused silica/quartz is a metastable phase of silica and no crystallisation occurs at normal temperature. Prolonged heating above 1000°C leads to crystallisation and in the crystalline phase the formation of high crystobalites occur. The thermal expansion and specific volume of these high crystobalites will be the same as fused silica and no damage to material is observed at high temperature. However, during cooling at 800°C fine cracks appear due to the mismatch of thermal expansion and at around 200-275°C structural changes occur and the high crystobalites are converted to low crystobalites, leading to complete failure of the material. Alkali ions increase devitrification and cleaning with distilled water is recommended between uses if articles are to be regularly heated above 1000°C.





