

# Crucibles

## Silica

### Silica Crucibles and Capsules

99.8% SiO<sub>2</sub>. Can be used up to 1050°C continuously and 1300°C for short periods. Inert to most substances except alkalis and some metallic oxides. All products are glazed and translucent. All dimensions and capacities are nominal.

#### Low Form Crucibles without lid

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

#### Lids for Low Form Crucibles CX505 only.

	<i>For crucibles</i>
<b>CX507-10</b>	CX505-10
<b>CX507-14</b>	CX505-14
<b>CX507-18</b>	CX505-18
<b>CX507-22</b>	CX505-22
<b>CX507-26</b>	CX505-26
<b>CX507-30</b>	CX505-30
<b>CX507-34</b>	CX505-34

#### Tall Form Crucibles without lid

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

#### Lids for Tall Form Crucibles CX515 only

	<i>For crucibles</i>
<b>CX517-14</b>	CX515-14
<b>CX517-18</b>	CX515-18
<b>CX517-22</b>	CX515-22
<b>CX517-26</b>	CX515-26

	<i>Dia. x ht.</i> <i>mm</i>	<i>Cap.</i> <i>ml</i>
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#### Broad Base Crucibles without lid

<b>CX522-18</b>	41 x 24	15
<b>CX522-22</b>	48 x 27	25
<b>CX522-26</b>	57 x 37	40

#### Circular Capsules without lid

<b>CX532-10</b>	40 x 15	10
<b>CX532-14</b>	48 x 15	20
<b>CX532-26</b>	56 x 28	45
<b>CX532-34</b>	75 x 28	80

#### Rectangular Capsules, without lid

	<i>L x W x H</i> <i>mm</i>	<i>Cap.</i> <i>ml</i>
<b>CX552-10</b>	60 x 28 x 12	10
<b>CX552-18</b>	52 x 42 x 18	25

#### Crucibles, coking

<b>CX582-10</b>	25 x 38mm, with projections
<b>CX582-15</b>	25 x 38mm, plain
<b>CX582-50</b>	Lid for CX582- coking crucibles
<b>CX582-55</b>	Plunger 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 cristobalites occur. The thermal expansion and specific volume of these high cristobalites 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 cristobalites are converted to low cristobalites, 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.

