

Mold Top Inserts

GLASSMATE®-HT graphite

Entegris' POCO Materials are ideal for high-heat applications such as mold top inserts. Made from GLASSMATE®-HT graphite, a unique high strength, 5-micron material impregnated with oxidation inhibitors, which raises the oxidation threshold, our mold top inserts can withstand the high temperatures of the glass bottle manufacturing process. GLASSMATE-HT graphite has low thermal conductivity which minimizes thermal and mechanical checks during mold release. This is an advantage over metallic inserts whose higher thermal conductivity and thermal expansion frequently cause bottle damage. The ability to remove the insert prior to cleaning the mold allows the insert to be used and re-used in multiple production runs, extending product life. Our inserts have a metal protective plate that resists damage, further extending its lifetime.



Mold top inserts made from GLASSMATE-HT graphite

FEATURES & BENEFITS

- Extends mold life
- No checks under finish
- Higher yields leading to higher peak rates

SPECIFICATIONS

Finish diameter	Based on customer mold design	
Typical material properties	Compressive strength	136 MPa (19,700 psi)
	Flexural strength	92 MPa (13,350 psi)
	Hardness	74 Shore
	Electrical resistivity	14.7 $\mu\Omega$ -m (580 $\mu\Omega$ -in)
	Coefficient of thermal expansion	8.1 $\mu\text{m}/\text{m}^\circ\text{C}$ (4.5 $\mu\text{in}/\text{in}^\circ\text{F}$)
	Thermal conductivity*	85 W/(cm·K) (50 BTU-ft/hr/ft ² °F)
	Oxidation threshold**	607°C (1125°F)

*Approximate values taken at room temperature; as temperature increases, thermal conductivity decreases.

**Oxidation threshold defined as temperature at which oxidation weight loss after 24 hours is approximately 1%.

FOR MORE INFORMATION

Please call your Regional Customer Service Representative or Distributor today to learn what our GLASSMATE® products can do for you. Visit poco.entegris.com/contact-us for the location nearest you.

TERMS AND CONDITIONS OF SALE

All purchases are subject to Poco Graphite's Terms and Conditions of Sale. To view and print this information, visit poco.entegris.com/terms-and-conditions.



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