

# Injection Molding of CALIBRE™ 303-10 Polycarbonate Resin

## Drying Recommendations

**Moisture Content:** It is recommended to dry this resin to less than 0.02% moisture.

**Dryer:** A desiccant-type dryer is recommended for this material. Hopper dryer may also be needed.

**Dew Point:** -20°F (-30°C) or lower is desired.

**Drying Time:** A minimum of 4 hours at 250°F (120°C) is typical, but dependent on dryer temperature.

## Equipment Specifications

**Shot Size:** As required to fill part.

**Clamp Tonnage:** 2.0-5.0 tons/in<sup>2</sup> (0.28-0.70 metric tons/cm<sup>2</sup>) of projected surface area.

**Barrel Capacity:** 40-70% of machine barrel size should be for part shot.

## Process Conditions

**Melt Temperature:** Can be varied as required to fill part. See Table 1.

**Mold Temperature:** Can be changed to affect demolding characteristics. See Table 1.

**Manifold/Drop Temperature:** 30-50°F (17-28°C) below melt temperature. See Table 1 for recommended melt temperatures and adjust manifold/drop temperature accordingly.

**Purging/Shutdown:** For short interruptions in production, empty the barrel and reduce barrel temperatures. For extended shutdowns, purge the machine with a purging compound or general purpose polystyrene before shutting down machine.

**Table 1:** Machine Temperature Recommendations

Temperatures	Range, °F (°C)	Aim, °F (°C)
Melt Temperature	560-590 (293-310)	575 (302)
Mold Temperature	160-220 (71-104)	190 (88)
Barrel – Feed	495-525 (257-274)	510 (266)
Barrel – Transition	515-545 (268-285)	530 (277)
Barrel – Metering	560-590 (293-310)	575 (302)
Nozzle	560-590 (293-310)	575 (302)

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.



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#### North America

U.S.	+1-855-TRINSEO (+1-855-874-6736)
U.S. & Canada	+1-989-633-1718

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#### Latin America

Brazil	+55-11-5184-8722
Argentina, Chile, South Region of LAA	+54-11-4319-0100
Mexico, Colombia, North Region of LAA	+52-55-5201-4700

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<b>Europe/Middle East/Africa</b>	+800-444-11-444
	+31-11567-2601

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<b>Asia Pacific</b>	+603-7965-53-19
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China	+86-21-3851-1017
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<b>Email</b>	<a href="mailto:CI@trinseo.com">CI@trinseo.com</a>
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