



## CoolPoly® D3606 Thermally Conductive Polyamide 4,6 (PA 4,6)

CoolPoly D3606 is a thermally conductive injection molding resin based on a Polyamide 4,6 (PA 4,6) matrix. CoolPoly D3606 is electrically insulative. Thermally conductive polymers like CoolPoly D3606 cool faster than standard injection molding grade resins.

### Typical Injection Molding Conditions

Temperature Settings	SI /Metric	English
Rear Zone	280 - 310 °C	540 - 590 °F
Center Zone	300 - 320 °C	570 - 610 °F
Front Zone	310 - 325 °C	590 - 620 °F
Nozzle	290 - 315 °C	550 - 600 °F
Melt	310 - 325 °C	590 - 620 °F
Mold	105 - 165 °C	225 - 325 °F

### Pressure Settings

Injection	5.2 - 10.4 MPa	750 - 1500 psi
Hold	1.7 - 5.2 MPa	250 - 750 psi
Back	0 - 0.35 MPa	0 - 50 psi

### Injection Settings

Fill	moderate - fast mm/sec	moderate - fast in/sec
Screw	50 - 150 rpm	50 - 150 rpm
cushion	0 - 0.63 cm.	0 - 0.25 inch.

### Drying Conditions

Starting Moisture Content			
0.05-0.2%	2-4 hrs @	80 °C	2-4 hrs @ 175 °F
0.2-0.5%	4-8 hrs @	80 °C	4-8 hrs @ 175 °F
>0.5% or unkown	12-24 hrs @	104 °C	12-24 hrs @ 220 °F
Dew Point		-40 °C	-40 °F

### Additional Information

- A low compression screw (less than 2.5:1) is recommended.
- Due to drool a reverse taper nozzle is suggested
- During startup raise nozzle temperature until process stabilizes to help prevent initial nozzle freeze-off
- This material, when shipped in 55 lb bags or Gaylords, is packaged at a maximum moisture content level of 0.1%.
- Material should be dried to a moisture content level of .05% or less prior to injection molding.
- Material is moisture sensitive. During processing use of a preheated desiccant dryer 175F is advised to keep material dry.
- Immediately close and seal any bag or container of unused material.

The information contained herein is provide for preliminary evaluation of the product. Due to the nature of differences in machine and tooling design, adjustments to the processing conditions are expected to be necessary to achieve optimal results. CoolPolymers extends no warranties, makes no representations and assumes no responsibility as to the accuracy or suitability of this information or this product for any purchaser's or user's use or for any consequence of its use. Cool Polymers disclaims any warranty of merchantability or warranty of fitness for any particular use. All statements, technical information and responsibility. Users shall determine the suitability of the products for their own intended application.