

# ForTii<sup>®</sup> Eco E11

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This quick start instruction gives an indication of the key settings for processing ForTii<sup>®</sup> Eco E11 to ensure best crystallization and prevent material degradation as a result of hydrolysis or thermal load. It is a summary of the Injection Molding Recommendations which can be found in our Plastics Finder at <https://envalior.plasticsfinder.com>. Our online guidelines are recommendations to help with material processing and/or to evaluate and resolve potential processing issues.

## MATERIAL HANDLING

### Drying

ForTii<sup>®</sup> grades are hygroscopic and absorb moisture from the air relatively quickly. Moisture absorption is fully reversible under the following drying conditions without compromising material quality. Preferred driers are de-humidified driers with dew points maintained between -30 and -40°C / -22 and -40°F. Vacuum driers with N<sub>2</sub> purge can also be used. Hot air ovens or hopper driers are not suitable for pre-drying ForTii<sup>®</sup> grades; the use of such driers may result in non-optimum performance.

Moisture content	Time	Temperature	
		[°C]	[°F]
0.1 – 0.2 and as delivered	2	100	212
0.2 – 0.5	4 – 8	100	212
>0.5	<100 or 24 or 4	100	212
		110	230
		120	248

## TEMPERATURE SETTINGS

Mold/Tool	Measured melt	Nozzle	Front	Center	Rear
80 – 150°C 176 – 302°F	320–330°C 608–626°F	320–325°C 608–617°F	320–325°C 608–617°F	315–325°C 599–617°F	310–320°C 590–608°F

Given barrel temperature settings are for shot weights > 2 grams. For smaller shot weights (< 2 grams) barrel temperature settings are typically 5–10°C lower.

## MELT RESIDENCE TIME

The optimal Melt Residence Time (MRT) for ForTii<sup>®</sup> Eco E11 is ≤ 2 minutes with preferably at least 50% of the maximal shot volume used. The MRT should not exceed 4 minutes.

A full self-service MRT calculation can be done using the following [link](#).

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