

Xytron™ U3020E

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Despite the fact that the above-mentioned grade is an extrusion grade, when using it for an injection molding process, the document below describes the typical injection molding recommendations.

This quick start instruction gives an indication of the key settings for processing Xytron™ U3020E 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

Hot air ovens or hopper driers can be used for pre-drying Xytron™ grades, however preferred driers are de-humidified driers with dew points maintained between -30 and -40°C / -22 and -40°F. Vacuum driers with N₂ purge can also be used.

Moisture content	Time	Temperature	
		[°C]	[°F]
as delivered	6-8	70-90	158-194

TEMPERATURE SETTINGS

Barrel temperature

Optimal settings are governed by barrel size and residence time. Furthermore, the level of glass and/or mineral reinforcement has to be taken into account.

Mold/Tool	Measured melt	Nozzle	Front	Center	Rear
130 – 140°C 266 – 284°F	290–310°C 554–590°F	290–310°C 554–590°F	290–310°C 554–590°F	280–300°C 536–572°F	270–290°C 518–554°F

MELT RESIDENCE TIME

The optimal Melt Residence Time (MRT) for Xytron™ U3020E is ≤ 6 minutes with preferably at least 50% of the maximal shot volume used. The MRT should not exceed 8 minutes.

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

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