

Xytron™ G4024T

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This quick start instruction gives an indication of the key settings for processing Xytron™ G4024T 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 | |
|------------------|------|-------------|---------|
| [%] | [h] | [°C] | [°F] |
| as delivered | 2-6 | 130-140 | 266-284 |

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 | |
|----------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--|
| 140 – 150°C 284 – 302°F | 310-340°C 590-644°F | 310-340°C 590-644°F | 320-340°C 608-644°F | 310-330°C 590-626°F | 300-320°C 572-608°F | |

MELT RESIDENCE TIME

The optimal Melt Residence Time (MRT) for Xytron™ G4024T 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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