

# EcoPaXX® Q–KG6

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This quick start instruction gives an indication of the key settings for processing EcoPaXX® Q–KG6 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://plasticsfinder.com>. Our online guidelines are recommendations to help with material processing and/or to evaluate and resolve potential processing issues.

## MATERIAL HANDLING

### Drying

EcoPaXX® 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 EcoPaXX® grades; the use of such driers may result in non–optimum performance.

| Moisture content         | Time | Temperature |      |
|--------------------------|------|-------------|------|
| [%]                      | [h]  | [°C]        | [°F] |
| 0.1–0.2 and as delivered | 2–4  | 80          | 176  |
| 0.2–0.5                  | 4–8  | 80          | 176  |

## TEMPERATURE SETTINGS

### Barrel temperature

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

| Mold/Tool                 | Measured melt          | Nozzle                 | Front                  | Center                 | Rear                   |  |
|---------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|--|
| 80 – 140°C<br>176 – 284°F | 275–310°C<br>527–590°F | 270–300°C<br>518–572°F | 270–290°C<br>518–554°F | 260–280°C<br>500–536°F | 250–270°C<br>482–518°F |  |

## MELT RESIDENCE TIME

The optimal Melt Residence Time (MRT) for EcoPaXX® Q–KG6 is ≤ 6 minutes with preferably at least 50% of the maximal shot volume used. The MRT should not exceed 10 minutes.

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

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