Selar® PA barrier resin drying guide

Selar® PA barrier resin is packaged dry in moisture-proof packages at 0.125% maximum moisture and can be extruded directly. However, Selar® PA resin does absorb moisture and should be dried if the bags have been opened, the resin has been exposed to relative humidities of greater than 50% for 1/2 hr or more, or the melt temperature exceeds 282°C (540°F). Typical drying temperatures are in the range of 80 to 95°C (175 to 205°F).

If drying is needed, dehumidified hoppers or tray driers that are capable of producing heated air with a dew point of -30 to -20°C (-22 to -4°F) are recommended. The drier should be a regenerative type, desiccant bed dryer with an exit air dew-point monitor. Typical drying temperatures are in the range of 62 to 93°C (180 to 200°F) for tray drying and 71 to 82°C (160 to 180°F) for hopper driers.

Figure 1 shows the time needed to dry Selar® PA to 0.1% moisture if dried at 88°C (190°F), the recommended drying conditions. Thus, the more moisture in the resin, the longer it will take to dry. A 4-hr drying period at 88°C (190°F) is optimum for a resin containing 0.3% water.

![Figure 1. Drying Time Curve for Selar® PA at 88°C (190°F)](image)

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