

Sappi Symbio PP range injection moulding tip sheet

Storage	It is recommended to store Symbio PP in closed packages under dry conditions. Air humidity can increase moisture content.				
Pretreatment	It is recommended to dry Symbio at 115°C for 3 hours prior to use				
Injection moulding	Symbio is partly a natural product, maximum processing temperatures should not exceed 200°C. A higher thermal load may cause degradation and possibly smouldering.				
	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Temperature from nozzle</td> <td style="text-align: right;">190/185/175/165°C</td> </tr> <tr> <td>Mould temperature</td> <td style="text-align: right;">50-70°C</td> </tr> </table>	Temperature from nozzle	190/185/175/165°C	Mould temperature	50-70°C
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Dwell time	<p>Dwell time should be as short as possible to prevent unnecessary colouring (yellowing) of the material. During a longer stop, if material is still present in the barrel, temperature should be lowered to prevent possible smouldering.</p> <p>Starting up after a stop could require several shots before possible unwanted coloured material is flushed out. When flushing larger quantities without a mould it is advised to cool the melt by collecting it in a container with water. This would prevent possible smouldering of the material</p>				
Flow	<p>Symbio PP solidifies in general faster than other PP varieties. In case unfilled cavities or unwanted flow marks are observed the following possible steps are recommended.</p> <ol style="list-style-type: none"> 1. Increase injection speed to medium- high 2. Increase mould temperature (maximum of 90 °C) 3. Increase screw temperatures, 190/190/190/170°C (do not exceed 200 °C) 4. Especially at higher injection speed good ventilation is important. Lack of ventilation results in degradation of the PP due to trapped air. This can be seen as white dots at end of flow path 				