Processing advice

Product name: **Biograde® C 7500**

Date of issue: 25.10.2010

Version: 1.0

1. Designation of product, preparation and manufacturer

1.1 Trade name: Biograde® C 7500

1.2 Use of product: Biodegradable compound for injection moulding made partially from renewable resources.

1.3 Manufacturer:

FKuR Kunststoff GmbH
Siemensring 79
D - 47 877 Willich
Phone: + 49 (0) 2154 / 92 51-0
Fax: + 49 (0) 2154 / 92 51-51
Mail: info@fkur.com
Web: www.fkur.com

2. Processing conditions for injection moulding

2.1 Machine equipment: Standard screw, open nozzle (needle valve for hot runner)

2.2 Machine settings:

Feeding Zone	60	[°C]
Zone 1	160	[°C]
Zone 2	190	[°C]
Zone 3	210	[°C]
Machine nozzle	220	[°C]
Mould temperature	30 - 75	[°C]
Holding pressure level	50 - 80	[%]
Melt cushion (of volume)	<10	[%]
Cooling time	5	[s]
max. Dwell time	300	[s]
Density	1.31	[g/cm³]
Bulk density	760	[kg/m³]
MFR (230 °C/5 kg)	17 - 21	[g/10 min]
Shrinkage	n.A.	[%]

2.3. General advice: Use high injection speed! Short holding pressure and cooling times can be used. To avoid burning (diesel effect) at high injection speeds venting at the flow path is recommended. The flow front should continuously move forward to avoid freezing effects.

Regrind sprues and runners can be reused at 20 %.
We recommend to use cold runner systems.

3. Purging advice

3.1 Before production: Purge the plastification unit and, if existing, the hot runner with PP or purging compound.

3.2 During production: Heat tools and plastificator unit to the recommended temperature. If tool is not filled, increase temperature stepwise. Material has a tendency to burn and therefore needs a constant melt flow.

3.3 After production: Purge the plastification unit and, if existing, the hot runner with PP or purging compound.

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3.4 Important information:	The dwell time of the material inside the machine shall be reduced to a minimum in order to lower the risk of pyrolysis.

4. Drying conditions and storage

4.1 General:	Biograde® C 7500 is a biodegradable plastic based on cellulose. Residual moisture content of more than 0.2 % can result in hydrolysis and evaporation in the injection unit or in condensed moisture on the mould.
4.2 Drying:	Drying is recommended at 60 °C for a period of 2 - 4 hours. Do not overheat the material and do not dry it longer than recommended.
4.3 Storage conditions:	It is essential to store the material in a dry and cool place. Opened octabins should be used immediately or adequately resealed to avoid moisture uptake.
4.4 Storage conditions for finished products:	Finished products made from Biograde® should be stored dry and cold. Storage time depends on processing parameters and on cilmate conditions in the respective area. FKuR Kunststoff GmbH cannot give any shelf life guarantees for finished goods. Please notice that the conditions mentioned above depend on experiences of our customers. We recommend that each customer executes individual storage tests according to his product specifications and storage requirements.

5. Legal notice

5.1 General:	Neither FKuR Kunststoff GmbH nor its marketing affiliates shall be responsible for the use of this information or of any product, method or equipment mentioned. Customers must undertake their own determination of this product's suitability and completeness for their own use, for the protection of the environment, for the health and safety of their employees and purchasers of their products. No warranty is made of the merchantability or fitness of any product, and nothing herein waives any of the seller's conditions of sale.