

## Technical Data Sheet Extrusion

### Product Name **bio-plast SHJ 700 S**

October 2010 Ver. 3.01

#### Identification of Substance and Supplier

Trade Name	bio-plast SHJ 700 S
Use of Product	Biodegradable resin for sheet extrusion / thermoforming
Supplier	JC Hagen GmbH Salmgasse 14 A-1030 Wien AUSTRIA

#### Features

SHJ 700 S	<ul style="list-style-type: none"><li>- is biodegradable</li><li>- can be used up to 120°C</li><li>- can be coloured</li><li>- is microwaveable and dishwasher proof</li><li>- is heat sealable</li><li>- can be sterilized by autoclave</li></ul>
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#### Applications

Applications in Principle	<ul style="list-style-type: none"><li>- disposable packaging articles</li><li>- fast food containers</li><li>- hot and cold drinking cups</li><li>- clamshell packaging</li><li>- icecream and dairy containers</li><li>- lids for coffee-to-go cups</li></ul>
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#### Compound Properties

Test Method	Unit	Values
Granule size and shape	mm	2 - 4
Melt density	g/cm <sup>3</sup>	1,05
Density	g/cm <sup>3</sup>	1,15
Bulk density	kg/m <sup>3</sup>	approx. 900
Melting point	°C	150 - 160
Softening point	°C	>125
MFI (190°C, 2,16kg)	g/10 min	2,5 - 3,0
Moisture content	%	<0,2
Ash content	%	< 3,0

#### Extruded Sheet Specimen Properties

Test Method	Unit	Values
Processing temperature max.	°C	240
Processing temperature min.	°C	165
Oxygen permeability	cm <sup>3</sup> /m <sup>2</sup> 24h	14,0 - 15,0
Water vapour permeability	g/m <sup>2</sup> 24h	1,8 - 2,0
Tensile strength at yield - MD	Mpa	>8,5
Elongation at break - MD	%	40-65
Charpy impact strength	kJ/m <sup>2</sup>	2,9

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#### **Food Contact**

All raw materials used in the manufacture of SHJ 700 S are listed in directive 2002/72/EC. Depending on duration and kind of application SHJ 700 S may be used in direct food contact applications.

#### **Biodegradability and Compostability**

Finished products made of SHJ 700 S are biodegradable and depending on size, shape and thickness compostable. The material is registered by VINCOTTE as OKAY COMPOST.

#### **Packaging and Delivery**

SHJ 700 S is a free flowing granule and available in 800 kg Big Bags. Export packages have waterproof liners.

#### **Storage and Handling**

During storage SHJ 700 S may absorb moisture. Maximum moisture absorption depends on ambient temperature and relative humidity. It is recommended to store bags in a dry and cool environment and keep bags sealed until processing.

#### **Shelf Life**

If stored correctly resin shelf life is up to 6 month from date of delivery.

#### **Safety**

SHJ 700 S is not a dangerous product in the sense of 76/548/EEC directive and not subject to transport regulations. For details refer to Material Safety Data Sheet.

#### **Disclaimer**

The information and data contained herein is believed to be accurate and is given in good faith. However, accuracy is not guaranteed for the product referred to herein and Kimia Chemie Zangan Co. disclaims all liability accordingly, whether in contract, court or otherwise.