

# Bioplastics 09/10

## Processing parameters and technical characteristics



The market report Bioplastics 09/10 – Processing Parameters and Technical Characteristics provides an extensive collection of technical parameters and processing characteristics of more than 100 worldwide available biodegradable plastics and bio-plastics. The report thus provides a comprehensive basis for plastic manufacturers and processors who are considering entering the bioplastics market.

Table 52: Parameters as per IFR for Capa 6500

Density	1,14 g/cm <sup>3</sup>	DIN 53479
Moisture absorption	0,16 %	23°C/50% LF
Hardness	54 Shore D	3 seconds, DIN 53505
Melt index (MFI)	3,6 g/10min	300°C, 2,16 kg, DIN ISO 1133
Shrinkage	0,93 %	Calliper
Annealing residue	0,29 %	TGA, 180°C
Melt temperature range	61-66°C	DSC
Vicat softening temperature	51 °C	Procedure B50 EN ISO 306
Tensile stress at yield	16,8 MPa	EN ISO 527-1
Strain at tensile stress at yield	13,8 %	EN ISO 527-1
Tensile E module	462 MPa	
Flexural stress at yield strength	18,2 MPa	DIN 53452
Strain of the outer fiber at yield strength	7,2 %	DIN 53452
Flexural stress at 3,5 %	13,5 MPa	DIN 53452
Bending E module	387 MPa	
Impact strength Charpy	no break	EN ISO 179/1 eU
Notched impact strength Charpy	12,3 KJ/m <sup>2</sup>	7,5 J pendulum EN ISO 179/1 eA

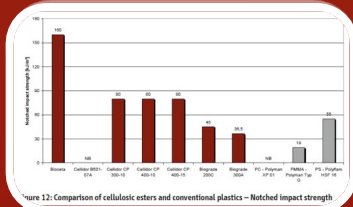


Figure 22: Comparison of cellulosic esters and conventional plastics – Notched impact strength

The key part of the report is a comprehensive, comparative compilation of technical characteristics and processing properties of biodegradable plastics and bioplastics. A large selection of these plastics has been lab tested at the Institute for Recycling (IfR) in Germany. The material tests have all been performed on a variety of testing machines at the in-house laboratory of the Institute. The technical parameters have been determined according to up-to-date DIN-standards.

The latest version of the report has been substantially extended. Additional information on 30 new bioplastics has been included. The report now contains detailed information on more than 100 biodegradable polymers and bioplastics.

A new chapter "Bioplastics – Economic opportunity or temporary phenomenon?" provides a detailed overview of the current situation of the international bioplastics market as well as an outlook on the expected development for the next few years.

The report also includes a comparative analysis that investigates differences and consistencies between bioplastics and conventional plastics in key parameters such as impact strength and E-module.

The report thus provides a comprehensive basis for plastic manufacturers and processors who are considering entering the bioplastics market.

### What our customers think:

"The Bioplastics Market Report saved us a lot of working time." Mario Barche, Schoeller Arca

"This report provided our company with parts of the basics we needed to position bioplastics in our development plan." Mathieu Roberge, Cascades

"In fact the report is the only report on the market that analyses biopolymer properties realistically and from a technological view." Peter Prader, Mondi

"The report is very useful in studying future trends in the bioplastics industry." Fausto Gironi, University Roma

### Overview:

- ✓ 100 bioplastics
- ✓ 40 manufacturers
- ✓ All in one easy-to-use report
- ✓ Extensive collection of technical parameters and processing characteristics
- ✓ Detailed overview of current market situation
- ✓ Comparison of bioplastics and conventional plastics in key parameters

### More information at:

[www.bioplastics24.com](http://www.bioplastics24.com)

© CTC Clean Tech Consulting GmbH

Lindenallee 39

20259 Hamburg, Germany



# Fax Order Form

PLEASE FAX COMPLETED FORM TO: +49 40 9506 92669

(\* ) = required

**Company Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**\*First Name:** \_\_\_\_\_

**\*Last Name:** \_\_\_\_\_

**\*Address:** \_\_\_\_\_

**\*City:** \_\_\_\_\_

**\*ZIP:** \_\_\_\_\_

**\*Country:** \_\_\_\_\_

**\*Phone:** \_\_\_\_\_

**\*Email:** \_\_\_\_\_

**I hereby order the following version of the Bioplastics 09/10 Processing parameters and technical characteristics market report (please tick):**

- English PDF version, single-user licence. Price: €795 (plus 19% GST)**
- English PDF version, global licence. Price: €1295 (plus 19% GST)**
- German PDF version, single-user licence. Price: €795 (plus 19% GST)**
- German PDF version, global licence. Price: €1295 (plus 19% GST)**
  
- I accept the General Terms & Conditions of CTC Clean Tech Consulting GmbH ([www.bioplastics24.com/terms](http://www.bioplastics24.com/terms)).**

**Signature:** \_\_\_\_\_



**Do you have further questions?** If you have questions in relation to the content of the report, please contact: FH-Braunschweig/Wolfenbüttel, Dr. rer. nat. Albert Otten, Robert-Koch-Platz 10-14, 38440 Wolfsburg, Tel. +49 5361 / 83 - 1428, E-Mail: [A.Otten@fh-wolfsburg.de](mailto:A.Otten@fh-wolfsburg.de)

If you have questions regarding the ordering process please contact us at: [bioplastics24@gmail.com](mailto:bioplastics24@gmail.com)

**You can also ORDER ONLINE at [www.bioplastics24.com/report](http://www.bioplastics24.com/report)**