

## PRODUCT QUALITY TESTING

### Testing according to EN 1555-3 AND ISO 8085-3 OF 32 MM PRESTO® ELECTROFUSION END-CAP FROM AL AZIZ PLASTICS PVT.

#### OBJECTIVE

The aim of the project was to perform a complete testing according to EN 1555-3 and ISO 8085-3 of the 32 mm PRESTO® electrofusion end-cap from Al Aziz Plastics Pvt. Ltd, India.

The compound used for the production of this product is the PE 100 compound Borstar® HE3490-IM black produced by the Borealis Group. This compound attained a PE 100 classification in 2005 at Exova.

Exova and its sub-contractor, performed the fully accredited testing.

#### ADDITIONAL COMMENTS

The classification of the material has been conducted by the compound manufacturer the Borealis Group and Exova.

The testing of the 32 mm PRESTO® electrofusion end-cap was conducted between 2009-02-11 and 2009-03-31 (original Exova report, P-09/46, can be received from Al-Aziz Plastics Pvt.).

The quality testing and the presented results are only valid for products produced with the PE 100 compound Borstar® HE3490-IM black from The Borealis Group.

#### RESULT OBTAINED

The 32 mm PRESTO® electrofusion end-cap passed the requirements in EN 1555-3 and ISO 8085-3, see Table 1.

#### DATE OF COMPLETION

**2009-04-22**



**Table 1** Results from the EN 1555-3/ISO 8085-3 testing

Characteristic	Test method	Sample	Requirement	Result	Pass/Fail
Hydrostatic strength	ISO 1167:2006	End-cap	20 °C, 12.4 MPa, 100 h	>100 h	Pass
Hydrostatic strength	ISO 1167:2006	End-cap	80 °C, 5.4 MPa, 165 h	>165 h	Pass
Hydrostatic strength	ISO 1167:2006	End-cap	80 °C, 5.0 MPa, 1 000 h	>1 000 h	Pass
Melt flow rate (MFR)	ISO 1133:1997	End-cap	≤20% change by processing	0.55 g/10 min	Pass
Melt flow rate (MFR)	ISO 1133:1997	End-cap	-	0.68 g/10 min	Pass
Oxidation induction time (OIT)	EN 728:1997	End-cap	> 20 minutes (200 °C)	>30 min (210 °C)	Pass

Exova Nyköping Polymer  
**T** +46 155 20 64 78  
**F** +46 155 26 31 25  
**E** jonathan.rabiei@exova.com  
**W** www.polymer.exova.com

Exova Marketing centre  
**T** +44 161 787 3291  
**F** +44 161 787 3251  
**E** info@exova.com  
**W** www.exova.com