

## PRODUCT QUALITY TESTING

### Testing according to EN 1555-3 AND ISO 8085-3 OF 32 MM PRESTO® ELECTROFUSION COUPLER 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 coupler 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 coupler was conducted between 2009-02-05 and 2009-03-31 (original Exova report, P-09/47, 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 coupler passed the requirements in EN 1555-3 and ISO 8085-3, see Table 1.

#### DATE OF COMPLETION

2009-04-02



**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	Coupler	20 °C, 12.4 MPa, 100 h	>100 h	Pass
Hydrostatic strength	ISO 1167:2006	Coupler	80 °C, 5.4 MPa, 165 h	>165 h	Pass
Hydrostatic strength	ISO 1167:2006	Coupler	80 °C, 5.0 MPa, 1 000 h	>1 000 h	Pass
Melt flow rate (MFR)	ISO 1133:1997	Coupler	≤20% change by processing	0.55 g/10 min	Pass
Melt flow rate (MFR)	ISO 1133:1997	Granules	-	0.68 g/10 min	Pass
Oxidation induction time (OIT)	EN 728:1997	Coupler	> 20 minutes (200 °C)	>30 min (210 °C)	Pass
Decohesive resistance	ISO 13955:1997	Coupler	≤ 33.3 % brittle failure	0 % brittle failure	Pass

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