

PRODUCT DATA SHEET

POLYPROPYLENE

Daplen™ EF011AIC

ELASTOMER MODIFIED 5% MINERAL FILLED POLYPROPYLENE FOR INJECTION MOLDING

DESCRIPTION

Daplen EF011AIC is an elastomer modified 5% mineral filled polypropylene compound for injection molding. It shows excellent balanced mechanical properties and gives a good surface quality.

APPLICATIONS

Daplen EF011AIC is designed for automotive interior parts requiring light weight applications

Door Panels and Pockets

Other automotive interior lightweight applications

Pillar trims

SPECIAL FEATURES

Good Scratch Resistance

Suitable for Low VOC requirements

PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Density	940 kg/m ³	ISO 1183
Melt Flow Rate (230°C/2.16kg)	20 g/10min	ISO 1133
Flexural Modulus (2mm/min)	1450 MPa	ISO 178
Tensile Stress at Yield (50mm/min)	21 MPa	ISO 527-2
Charpy Impact Strength, notched (23°C)	25 kJ/m ²	ISO 179/1eA
Fogging Gravimetric (100°C,16h)	<2.0 mg	DIN 75201
Emissions	<50 µgC/g	VDA277
Mould Average Shrinkage*	0.9% - 1.1%	Borouge Method

*Measured on 150 mm x 90 mm x 3 mm plaques at conditions 23°C. These values are only valid as a reference and not for specification/tool cutting purpose.

*Data should not be used for specification work

PROCESSING CONDITIONS

To avoid residual humidity from transport or storage, the material should be pre-dried approximately 2h at 80°C.

Following parameters should be used as guidelines:

Holding pressure	50% - 70% of the injection pressure
Mould temperature	30 - 50°C
Injection mass temperature	220 - 260°C
Injection speed	Low to medium
Screw speed	Slow to medium

- Injection machine barrel must be cleaned carefully during startup to remove possible degraded remains and impurities.
- Shot size is suggested to be kept at 30-70% of machine shot capacity to avoid long material residence time.
- Lower shear rate of plastic material is recommended to achieve lower VOC and odour. Injection speed is recommended to be kept at lower level if part filling is not an issue. Bigger gate size is recommended and try not to use small pin point gate and banana gate.
- Upon successful filling without appearance defect, low barrel temperature is preferred to achieve lower VOC.
- Avoid using mould release or lubricant agent during moulding process, which will possibly generate undesirable volatiles and odour.

Specific recommendations for processing conditions can be determined only when the application and type of equipment are known. Please contact your local Borouge representative for such particulars.

STORAGE

Daplen EF011AIC should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

More information on storage can be found in Safety Information Sheet (SIS) for this product.

SAFETY

The product is not classified as a hazardous preparation.

Please see our Safety Information Sheet (SIS) for details on various aspects of safety, recovery and disposal of the product, for more information contact your Borouge representative.

RECYCLING

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

RELATED DOCUMENTS

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.

Safety Information Sheet

Statement on chemicals, regulations and standards

STANDARDS

Borouge is certified to various ISO standards, please refer to Borouge.com for more information.

DISCLAIMER

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.

Borouge makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose.

The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of Borouge products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.

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