

PRODUCT DATA SHEET

POLYPROPYLENE

RCE444NP

POLYPROPYLENE RANDOM COPOLYMER FOR INJECTION MOULDING

DESCRIPTION

RCE444NP is a polypropylene random copolymer intended for injection moulding. This grade is a Near Prime material.

APPLICATIONS

Various injection moulded products

Compounds and master batches

SPECIAL FEATURES

Good flow behaviour

Good stiffness and moderate impact

PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Density	900-910kg/m ³	ISO 1183
Melt Flow Rate (230°C/2.16kg)	20-35g/10min	ISO 1133
Tensile Modulus (1mm/min)	900MPa ^{***}	ISO 527-2
Tensile Strain at Yield (50mm/min)	12% ^{***}	ISO 527-2
Tensile Stress at Yield (50mm/min)	22MPa ^{***}	ISO 527-2
Charpy Impact Strength, notched (23°C)	4.0KJ/m ^{2***}	ISO 179/1eA
Heat Deflection Temperature(0,45MPa)**	75°C ^{***}	ISO 75-2
Hardness, Rockwell(R-scale)	80 ^{***}	ISO 2039-2

*Data should not be used for specification work

** Measured on injection moulded specimens acc. to ISO 1873-2

*** Because the grade is a transition grade from homo polymer to block copolymer or from one type block copolymer to another, the grade may be composed of material with different levels of ethylene. Mechanical properties may vary from lot to lot.

Appearance of individual pellets is sometimes different depending on ethylene content.

PROCESSING CONDITIONS

RCE444NP is easy to process with standard injection moulding machines.

Following parameters should be used as guidelines:

Melt temperature: 220 - 260°C
 Holding pressure: 200 - 500bar As required to avoid sink marks
 Mould temperature: 20 - 40°C
 Injection speed: High
 Shrinkage 1 - 2%, depending on wall thickness and moulding parameters

STORAGE

RCE444NP 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
Statement on compliance to food contact regulations

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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