

PRODUCT DATA SHEET

POLYPROPYLENE

HC205TF

POLYPROPYLENE HOMOPOLYMER FOR THERMOFORMING

DESCRIPTION

HC205TF is a polypropylene Homopolymer produced by the proprietary **Borstar®** process, intended for sheet and thermoformed packaging applications.

This product is produced using the **Borstar Nucleation Technology (BNT)**. Its increased crystallization temperature allows reduced cycle time and increased output. Articles originating from this product have excellent transparency, good organoleptic properties, good balance of stiffness and impact strength at ambient temperatures.

CAS No. 9003-07-0

APPLICATIONS

In-line & offline thermoforming
Margarine tubs and dairy containers
High transparency trays, cups and containers
Blending with copolymers for lids

SPECIAL FEATURES

Good stiffness-impact balance	Excellent clarity
Consistent shrinkage (post forming)	Reduced cycle time/ higher output
Excellent processability	Broad application window
Excellent product consistency	

PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Density	900-910kg/m ³	ISO 1183
Melt Flow Rate (230°C/2.16kg)	4g/10min	ISO 1133
Tensile Modulus (1mm/min)	1750MPa	ISO 527-2
Tensile Strain at Yield (50mm/min)	8%	ISO 527-2
Tensile Stress at Yield (50mm/min)	35,5MPa	ISO 527-2
Flexural Modulus	1750MPa	ISO 178
Tensile Strain at Yield	8%	ASTM D638
Tensile Stress at Yield	35,5MPa	ASTM D638
Flexural Modulus(by 1% secant)	1700MPa	ASTM D790A
Charpy Impact Strength, notched (23°C)	5kJ/m ²	ISO 179/1eA
IZOD Impact Strength, notched (23°C)	40J/m	ASTM D256
Heat Deflection Temperature(0,45MPa)**	107°C	ISO 75-2
Vicat Softening Temperature(Method A)***	145°C	ISO 306
Hardness, Rockwell(R-scale)	106	ISO 2039-2

*Data should not be used for specification work

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

*** Measured on injection moulded specimens, conditioned at 23°C and 50% Rel. Hum.

Borouge Pte Ltd
1 George Street, #18-01
Singapore 049145
T +65 6275 4100 F +65 6377 1233

Borouge is a joint venture of ADNOC and Borealis

PROCESSING CONDITIONS

The actual conditions will depend on the type of equipment used.

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

HC205TF 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.

April 2025