

Noryl* Resin ENG265

Americas: COMMERCIAL

PPE+PS blend. Unfilled. Suitable for profile extrusion. NSF listed for potable water use in several colors (Standard 61). Low water absorption. Hydrolytic stability. Dimensional stability. Typical applications include tubes for reverse osmosis systems.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	50	MPa	ASTM D 638
Tensile Stress, yld, Type I, 50 mm/min	56	MPa	ASTM D 638
Tensile Strain, yield	3.3	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	28	%	ASTM D 638
Tensile Modulus, 5 mm/min	2400	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	89	MPa	ASTM D 790
Flexural Stress, yld, 2.6 mm/min, 100 mm span	88	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2550	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	2450	MPa	ASTM D 790
Hardness, Rockwell R	119	-	ASTM D 785
Tensile Stress, yield	55	MPa	ISO 527
Tensile Stress, break	50	MPa	ISO 527
Tensile Strain, yield	3.1	%	ISO 527
Tensile Strain, break	27	%	ISO 527
Tensile Modulus, 1 mm/min	2550	MPa	ISO 527
Flexural Stress	95	MPa	ISO 178
Flexural Modulus	2500	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	186	J/m	ASTM D 256
Izod Impact, notched, -30°C	114	J/m	ASTM D 256
Gardner, -30°C	25	J	ASTM D 3029
Gardner, -40°C	5	J	ASTM D 3029
Instrumented Impact Total Energy, 23°C	39	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	13	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	8	kJ/m ²	ISO 180/1A
Charpy Impact, notched, 23°C	13	kJ/m ²	ISO 179/2C
Charpy Impact, notched, -30°C	10	kJ/m ²	ISO 179/2C
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	132	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	118	°C	ASTM D 648
HDT, 0.45 MPa, 6.4 mm, unannealed	137	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	126	°C	ASTM D 648
CTE, -40°C to 95°C, flow	5.94E-05	1/°C	ASTM E 831
Vicat Softening Temp, Rate B/50	137	°C	ISO 306
Vicat Softening Temp, Rate B/120	141	°C	ISO 306
Relative Temp Index, Elec	105	°C	UL 746B
Relative Temp Index, Mech w/impact	90	°C	UL 746B
Relative Temp Index, Mech w/o impact	105	°C	UL 746B

PHYSICAL	Value	Unit	Standard
Specific Gravity	1.06	-	ASTM D 792
Water Absorption, 24 hours	0.06	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	SABIC Method
Melt Flow Rate, 280°C/5.0 kgf	8.4	g/10 min	ASTM D 1238
Melt Volume Rate, MVR at 280°C/5.0 kg	8	cm ³ /10 min	ISO 1133
ELECTRICAL	Value	Unit	Standard
Dielectric Strength, in oil, 3.2 mm	19.6	kV/mm	ASTM D 149
Relative Permittivity, 50/60 Hz	2.65	-	ASTM D 150
Dissipation Factor, 50/60 Hz	0.0004	-	ASTM D 150
Arc Resistance, Tungsten {PLC}	7	PLC Code	ASTM D 495
Hot Wire Ignition {PLC}	2	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	4	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	3	PLC Code	UL 746A
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94HB Flame Class Rating (3)	1.47	mm	UL 94

Source GMD, last updated:08/09/2004

Processing

Parameter	Value	Unit
Extrusion		
Drying Temperature	105 - 115	°C
Drying Time	2 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	225 - 255	°C
Barrel - Zone 1 Temperature	205	°C
Barrel - Zone 2 Temperature	205	°C
Barrel - Zone 3 Temperature	225	°C
Barrel - Zone 4 Temperature	225	°C
Adapter Temperature	250	°C
Die Temperature	250	°C

Source GMD, last updated:08/09/2004

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.

(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

(4) Internal measurements according to UL standards.

Disclaimer : THE MATERIALS AND PRODUCTS OF THE BUSINESSES MAKING UP THE SABIC INNOVATIVE PLASTICS COMPANY, ITS SUBSIDIARIES AND AFFILIATES ("SABIC IP"), ARE SOLD SUBJECT TO SABIC IP' S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SABIC IP MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (I) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (II) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SABIC IP MATERIALS, PRODUCTS, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SABIC IP' S STANDARD CONDITIONS OF SALE,

SABIC IP AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS OR PRODUCTS DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of SABIC IP' s materials, products, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating SABIC IP materials or products will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of SABIC IP' s Standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by SABIC IP. No statement contained herein concerning a possible or suggested use of any material, product or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of SABIC Innovative Plastics Company or any of its subsidiaries or affiliates covering such use or design, or as a recommendation for the use of such material, product or design in the infringement of any patent or other intellectual property right

* Noryl is a trademark of the SABIC Innovative Plastics Company

© 1997-2008 SABIC Innovative Plastics Company.All rights reserved