

DuPont™ Rynite® RE5264 NC010

THERMOPLASTIC POLYESTER RESIN

Product Information

Common features of Rynite® thermoplastic polyester include mechanical and physical properties such as excellent balance of strength and stiffness, dimensional stability, creep resistance, heat resistance, high surface gloss and good inherent electrical properties at elevated temperature. It can be processed over a broad temperature range and has excellent flow properties.

Rynite® thermoplastic polyester resins are typically used in demanding applications in the automotive, electrical and electronics, appliances where they successfully replace metals and thermosets, as well as other thermoplastic polymers.

Rynite® RE5264 NC010 is a 36% glass reinforced, modified polyethylene terephthalate resin developed for applications that need high burst strength.

Product information	Value	Unit	Test Standard
Resin Identification	PET-GF36	-	ISO 1043
Part Marking Code	>PET-GF36<	-	ISO 11469
Rheological properties	Value	Unit	Test Standard
Moulding shrinkage, parallel	0.2	%	ISO 294-4, 2577
Moulding shrinkage, normal	0.9	%	ISO 294-4, 2577
Mold Shrinkage, Flow, 3.2mm (0.125in)	0.15	%	-
Mold Shrinkage, Transverse, 3.2mm (0.125in)	1.05	%	-
Mechanical properties	Value	Unit	Test Standard
Tensile Modulus	14000	MPa	ISO 527-1/-2
Stress at break	190	MPa	ISO 527-1/-2
Strain at break	2	%	ISO 527-1/-2
Flexural Modulus	12000	MPa	ISO 178
Flexural Strength	280	MPa	ISO 178
Charpy impact strength, 23°C	55	kJ/m ²	ISO 179/1eU
Charpy notched impact strength			ISO 179/1eA
23°C	9.5	kJ/m ²	
-30°C	9	kJ/m ²	
-40°C	9	kJ/m ²	
Poisson's ratio	0.33	-	-
Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	247	°C	ISO 11357-1/-3
Temp. of deflection under load			ISO 75-1/-2
1.8 MPa	230	°C	
0.45 MPa	245	°C	
Coeff. of linear therm. expansion, parallel	20	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	70	E-6/K	ISO 11359-1/-2
Flammability	Value	Unit	Test Standard
FMVSS Class	B	-	ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	<80	mm/min	ISO 3795 (FMVSS 302)
Electrical properties	Value	Unit	Test Standard
Electric strength	21.5	kV/mm	IEC 60243-1
Other properties	Value	Unit	Test Standard
Density	1660	kg/m ³	ISO 1183
Injection	Value	Unit	Test Standard
Drying Recommended	yes		-
Drying Temperature**	120	°C	-
Drying Time, Dehumidified Dryer	4 - 6	h	-
Processing Moisture Content	≤0.01 ^[1]	%	-
Melt Temperature Optimum	285	°C	-
Min. melt temperature	280	°C	-
Max. melt temperature	300	°C	-
Max. screw tangential speed	0.2	m/s	-

Revised: 2019-07-18

Page: 1 of 5

To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

North America

Tel: +1 302 999-4592

Toll-Free (USA): 800 441-0575

Asia Pacific

Tel: +81 3 5521 8600

Europe/Middle East/Africa

Tel: +41 22 717 51 11



Copyright 2017 DuPont. The DuPont Oval Logo is a trademark or registered trademark of E.I. du Pont de Nemours and Company or its affiliates. All rights reserved.

DuPont™ Rynite® RE5264 NC010

THERMOPLASTIC POLYESTER RESIN

Mold Temperature Optimum	140 °C	-
Min. mould temperature	120 °C	-
Max. mould temperature	140 ^[2] °C	-
Hold pressure range	≥80 MPa	-
Hold pressure time	4 s/mm	-
Back pressure	As low as possible MPa	-
Ejection temperature	170 °C	-

1: At levels above 0.01%, strength and toughness will decrease, even though parts may not exhibit surface defects. 2: (6mm - 1mm thickness)

Characteristics

Regional Availability	<ul style="list-style-type: none"> • North America • Asia Pacific • South and Central America
Processing	<ul style="list-style-type: none"> • Injection Moulding
Delivery form	<ul style="list-style-type: none"> • Pellets
Additives	<ul style="list-style-type: none"> • Release agent

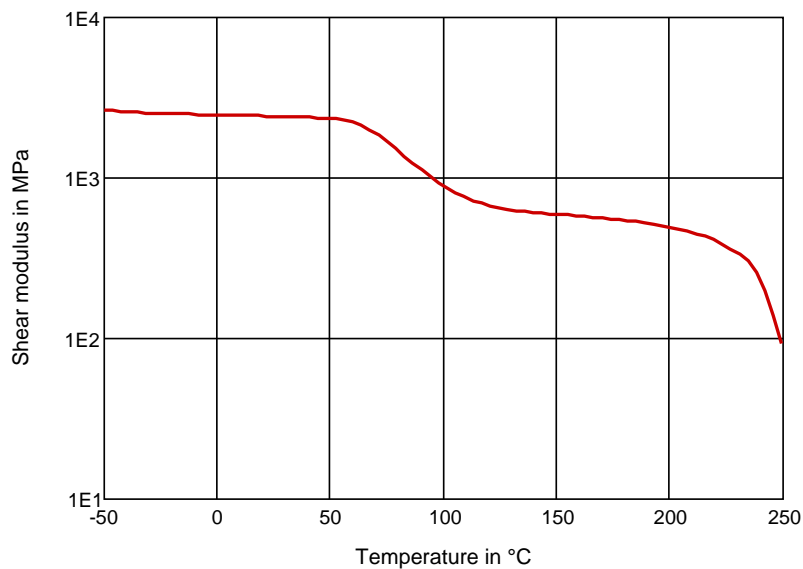


DuPont™ Rynite® RE5264 NC010

THERMOPLASTIC POLYESTER RESIN

Diagrams

Dynamic Shear modulus-temperature



Revised: 2019-07-18

Page: 3 of 5

To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

North America

Tel: +1 302 999-4592

Toll-Free (USA): 800 441-0575

Asia Pacific

Tel: +81 3 5521 8600

Europe/Middle East/Africa

Tel: +41 22 717 51 11

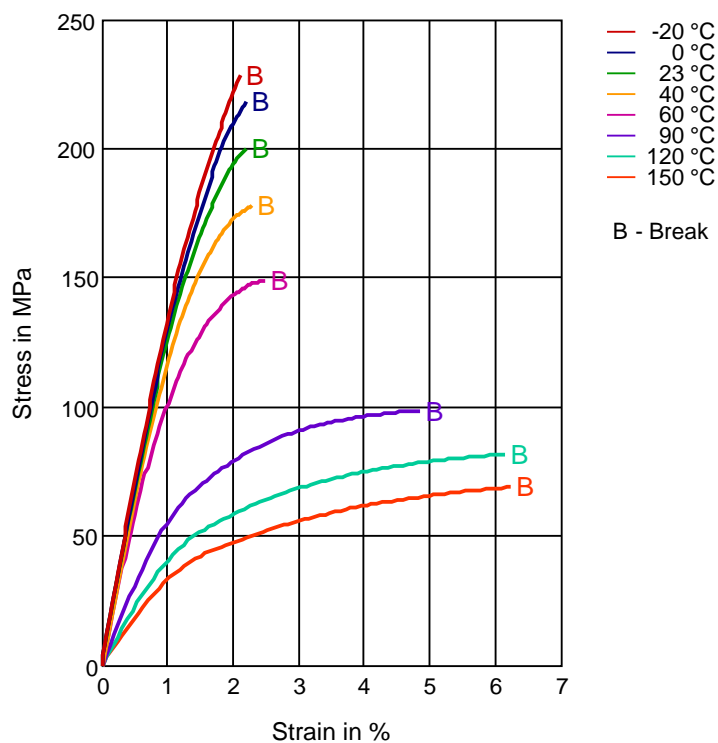
Copyright 2017 DuPont. The DuPont Oval Logo is a trademark or registered trademark of E.I. du Pont de Nemours and Company or its affiliates. All rights reserved.



DuPont™ Rynite® RE5264 NC010

THERMOPLASTIC POLYESTER RESIN

Stress-strain



Revised: 2019-07-18

Page: 4 of 5

To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

North America

Tel: +1 302 999-4592

Toll-Free (USA): 800 441-0575

Asia Pacific

Tel: +81 3 5521 8600

Europe/Middle East/Africa

Tel: +41 22 717 51 11

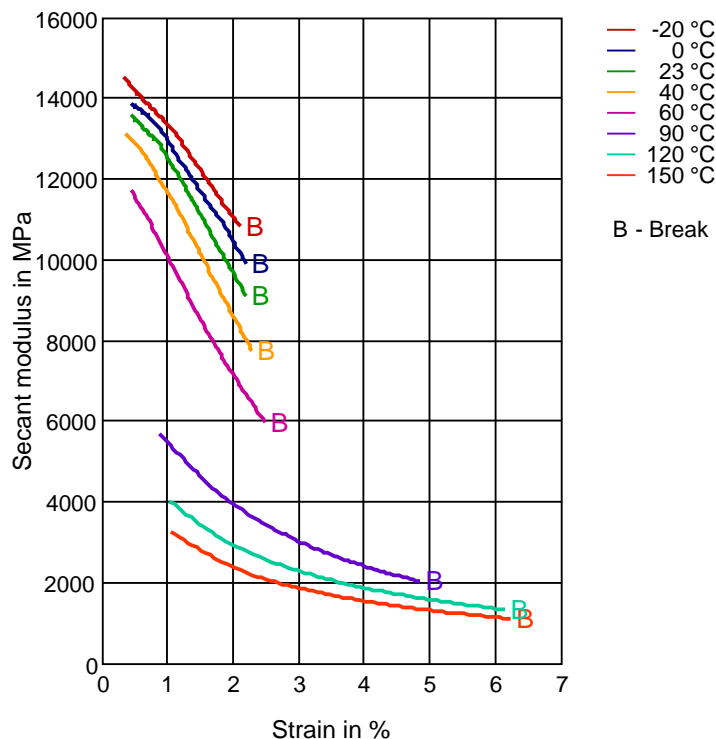
Copyright 2017 DuPont. The DuPont Oval Logo is a trademark or registered trademark of E.I. du Pont de Nemours and Company or its affiliates. All rights reserved.



DuPont™ Rynite® RE5264 NC010

THERMOPLASTIC POLYESTER RESIN

Secant modulus-strain



Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc. ISO Mechanical properties measured at 4mm (Hytrel® measured at 2 mm), IEC Electrical properties measured at 2mm, all ASTM properties measured at 3.2mm, and test temperatures are 23 °C unless otherwise stated.

The information set forth herein is furnished free of charge and is based on technical data that DuPont believes to be reliable and falls within the normal range of properties. It is intended for use by persons having technical skill, at their own discretion and risk. This data should not be used to establish specification limits nor used alone as the basis of design. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any product, evaluation under end-use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on patents. Caution: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, discuss with your DuPont customer representative and read Medical Caution H-50103-5.

DuPont™, the DuPont Oval Logo, and all products, unless otherwise noted, denoted with ™, ® or ® are trademarks, service marks or registered trademarks of affiliates of DuPont de Nemours, Inc. © 2019 DuPont de Nemours, Inc. All rights reserved.

