



## THERMOPLASTIC POLYESTER ELASTOMER

Hytrel® HTR8797 BK320 is a 55 Shore D High Viscosity Polyester Elastomer with Excellent Heat Ageing Protection Developed for Blow Molding

Product information	
	SO 1043
	O 11469
rartivialing dode >11 0-L12	0 11403
Rheological properties	
Melt volume-flow rate 9 cm <sup>3</sup> /10min	SO 1133
Temperature 240 °C	
Load 10 kg	
· · · · · · · · · · · · · · · · · · ·	SO 1133
Melt mass-flow rate, Temperature 240 °C	
Melt mass-flow rate, Load 10 kg	
Moulding shrinkage, parallel 2.1 % ISO 294	-4, 2577
Moulding shrinkage, normal 2.1 % ISO 294	-4, 2577
Typical mechanical properties	
	527-1/-2
	527-1/-2
	527-1/-2
	527-1/-2
,	527-1/-2
	527-1/-2
	527-1/-2
	527-1/-2
	ISO 178
	179/1eU
	179/1eA
· · · · · · · · · · · · · · · · · · ·	179/1eA
	179/1eA
1,	) 180/1A
Poisson's ratio 0.48	
	ISO 974
Shore D hardness, 15s 51 ISO 48-4 /	ISO 868
	ISO 868
Tear strength, parallel 140 kN/m	SO 34-1
	SO 34-1
Thermal properties	
	357-1/-3
	357-1/-3
·	) 75-1/-2
·	ISO 306
	359-1/-2

Printed: 2025-05-30 Page: 1 of 8





## THERMOPLASTIC POLYESTER ELASTOMER

Coefficient of linear thermal expansion (CLTE), parallel	197	E-6/K	ISO 11359-1/-2
CLTE, Parallel, 23-55°C(73-130°F)	203	E-6/K	ASTM E 831
Coeff. of linear therm. expansion, parallel, 55-160°C		E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal, -40-23°C		E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE),		E-6/K	ISO 11359-1/-2
normal	.00	2 0/11	100 11000 1/12
Coeff. of linear therm. expansion, normal, 55-160°C	217	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, Normal, 23-55°C		E-6/K	ASTM E 831
(73-130°F)		_ 0,	,
Flammability			
FMVSS Class	В		ICO 2705 (EMVCC 202)
	B	mm/min	ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	43	TTITTI/TTIIT1	ISO 3795 (FMVSS 302)
Physical/Other properties			
Density	1190	kg/m³	ISO 1183
Density of melt	1010	kg/m³	
Injection			
Drying Recommended	VOC		
Drying Temperature	yes 110	°C	
Drying Temperature Drying Time, Dehumidified Dryer	2 - 4		
Processing Moisture Content	≤0.08		
Melt Temperature Optimum	≥0.08 245		
Min. melt temperature	240		
Max. melt temperature	255		
Mold Temperature Optimum		°C	
Min. mould temperature		°C	
Max. mould temperature		°C	
wax. modia temperature	30	O	
Extrusion			
Processing Moisture Content	≤0.06	%	
Melt Temperature Optimum	230	°C	
Blow Molding			
Drying Recommended	yes		
Drying Temperature	90 - 100	°C	
Drying Time, Dehumidified Dryer	4 - 6		
Processing Moisture Content	≤0.03	%	
Melt Temperature Optimum	235	°C	
Melt Temperature Range	230 - 240		
Swell ratio	2.6		
Mold Temperature Optimum		°C	
Mold Temperature Range	30 - 70	°C	

Printed: 2025-05-30 Page: 2 of 8





## THERMOPLASTIC POLYESTER ELASTOMER

### Characteristics

Processing Injection Moulding, Extrusion, Other Extrusion, Blow Moulding

Delivery form Pellets

Special characteristics Heat stabilised or stable to heat

### Additional information

Injection molding PREPROCESSING

Drying recommended = Yes Drying temperature = 110°C

Drying time, dehumidified dryer = 2-4 hProcessing moisture content = <0.08 %

### **PROCESSING**

Melt temperature optimum = 245 °C Mold temperature optimum = 45 °C Mold temperature range = 40-50 °C

### **Automotive**

OEM ADDITIONAL INFORMATION

General Motors Part Specific Approval, Please Contact Your

CE Representative For More Details.

Mercedes-Benz DBL5562.AA39 TPC VW Group VW 50123 TPC-ET

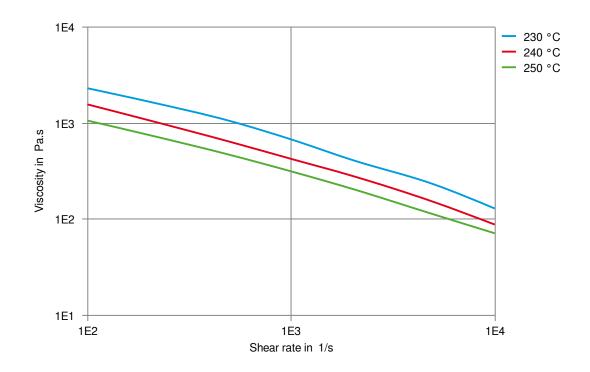
Printed: 2025-05-30 Page: 3 of 8





THERMOPLASTIC POLYESTER ELASTOMER

Viscosity-shear rate



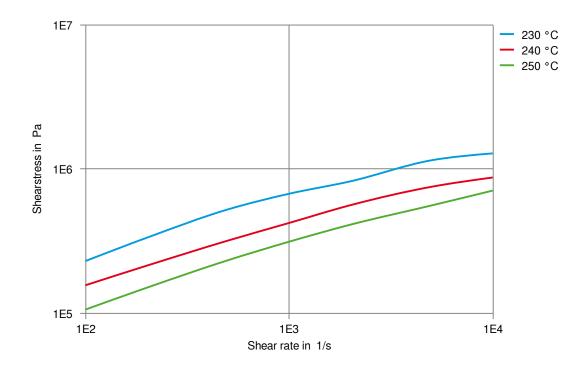
Printed: 2025-05-30 Page: 4 of 8





THERMOPLASTIC POLYESTER ELASTOMER

Shearstress-shear rate



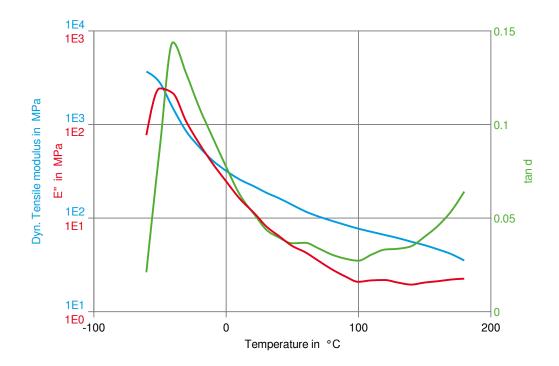
Printed: 2025-05-30 Page: 5 of 8





THERMOPLASTIC POLYESTER ELASTOMER

Dynamic Tensile modulus-temperature



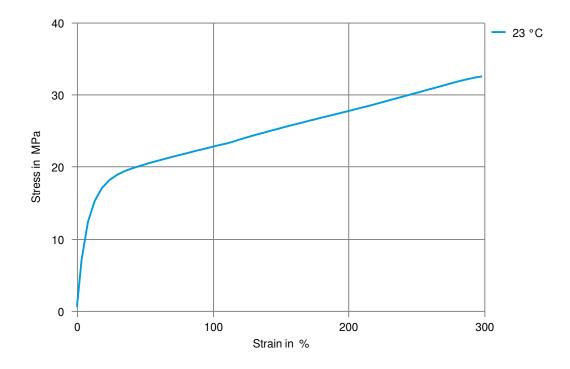
Printed: 2025-05-30 Page: 6 of 8





THERMOPLASTIC POLYESTER ELASTOMER

Stress-Strain (Flexible Materials)



Printed: 2025-05-30 Page: 7 of 8





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### Chemical Media Resistance

#### Mineral oils

✓ Insulating Oil, 23°C

#### Other

✓ Water, 23°C

X Water, 90°C

#### Symbols used:

possibly resistant

Defined as: Supplier has sufficient indication that contact with chemical can be potentially accepted under the intended use conditions and expected service life. Criteria for assessment have to be indicated (e.g. surface aspect, volume change, property change).

★ not recommended - see explanation

Defined as: Not recommended for general use. However, short-term exposure under certain restricted conditions could be acceptable (e.g. fast cleaning with thorough rinsing, spills, wiping, vapor exposure).

Printed: 2025-05-30 Page: 8 of 8

Revised: 2025-04-18 Source: Celanese Materials Database

NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colourants or other additives may cause significant variations in data values. Properties of moulded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Other than those products expressly identified as medical grade (including by MT® product designation or otherwise), Celanese's products are not intended for use in medical or dental implants. Regardless of any such product designation, any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use. To the best of our knowledge, the information contained in this publication is accurate; however, we do not assume any liability whatsoever for the accuracy and completeness of such information. The information contained in this publication should not be construed as a promise or guarantee of specific properties of our products. It is the sole responsibility of the users to investigate whether any existing patents are infringed by the use of the materials mentioned in this publication. Moreover, there is a need to reduce human exposure to many materials to the lowest practical limits in view of possible adverse effects. To the extent that any hazards may have been mentioned in this publication, we neither suggest nor guarantee that such hazards are the only ones that exist. We recommend that persons intending to rely on any recommendation or to use any e

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