Celanese
The chemistry inside innovation™

TECNOPRENE® AK7HCT

TECNOPRENE®

High crystallinity polypropylene homopolymer reinforced with 35% chemically coupled glass fiber, high heat stabilization. (PP-GF35)

Product information

Resin Identification	PP-GF35	ISO 1043
Part Marking Code	>PP-GF35<	ISO 11469

Rheological properties

Melt mass-flow rate	2	g/10min	ISO 1133
Melt mass-flow rate, Temperature	230	°C	
Melt mass-flow rate, Load	2.16	kg	
Moulding shrinkage range, parallel	0.2 - 0.5	%	ISO 294-4, 2577
Moulding shrinkage range, normal	0.4 - 0.8	%	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	8500	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	105	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.6	%	ISO 527-1/-2
Flexural modulus	8500	MPa	ISO 178
Flexural strength	170	MPa	ISO 178
Charpy impact strength, 23°C	55	kJ/m²	ISO 179/1eU
Charpy impact strength, -30°C	52	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	12	kJ/m²	ISO 179/1eA
Charpy notched impact strength, -30°C	9	kJ/m²	ISO 179/1eA
Poisson's ratio	0.4		

Thermal properties

Temperature of deflection under load, 1.8 MPa	152	°C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	26[1]	E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	132[1]	E-6/K	ISO 11359-1/-2

[1]: Temperature range: 0°C to 100°C

Flammability

Burning Behav. at 1.5mm nom. thickn.	HB	class	IEC 60695-11-10
Burning Behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	3.2	mm	IEC 60695-11-10
FMVSS Class	B		ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	67.1	mm/min	ISO 3795 (FMVSS 302)

Electrical properties

Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Comparative tracking index	400		IEC 60112
Comparative tracking index, 100 drops	350		IEC 60112

Celanese
The chemistry inside innovation™

TECNOPRENE® AK7HCT

TECNOPRENE®

Physical/Other properties

Density	1180 kg/m³	ISO 1183

Injection

Ejection temperature	117 °C

Characteristics

Processing	Injection Moulding
Special characteristics	Heat stabilised or stable to heat

Additional information

Processing Notes

Storage

This product should be stored in a covered facility and kept away from moisture and heat.

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Renault	UB02a, PMR2020, Black(NERO AS9), No Spec, Special Part Approval, See Your CE Account Manager.	
Renault	UB02d, PMR2020, Black (NERO AS9), No Spec, Special Part Approval, See Your CE Account Manager.	
Renault	UB04a, PMR2020, Black (NERO AS9), No Spec, Special Part Approval, See Your CE Account Manager.	
Renault	UB05a, PMR2020, Black (NERO AS9), No Spec, Special Part Approval, See Your CE Account Manager.	
Renault	UB05i, PMR2020, Black (NERO AS9), No Spec, Special Part Approval, See Your CE Account Manager.	
Renault	UB09a, PMR2020, Black (NERO AS9), No Spec, Special Part Approval, See Your CE Account Manager.	
Renault	UB09b, PMR2020, Black (NERO AS9), No Spec, Special Part Approval, See Your CE Account Manager.	
Renault	UB09c, PMR2020, Black (NERO AS9), No Spec, Special Part Approval, See Your CE Account Manager.	
Renault	UB09h, PMR2020, Black (NERO AS9), No Spec, Special Part Approval, See Your CE Account Manager.	

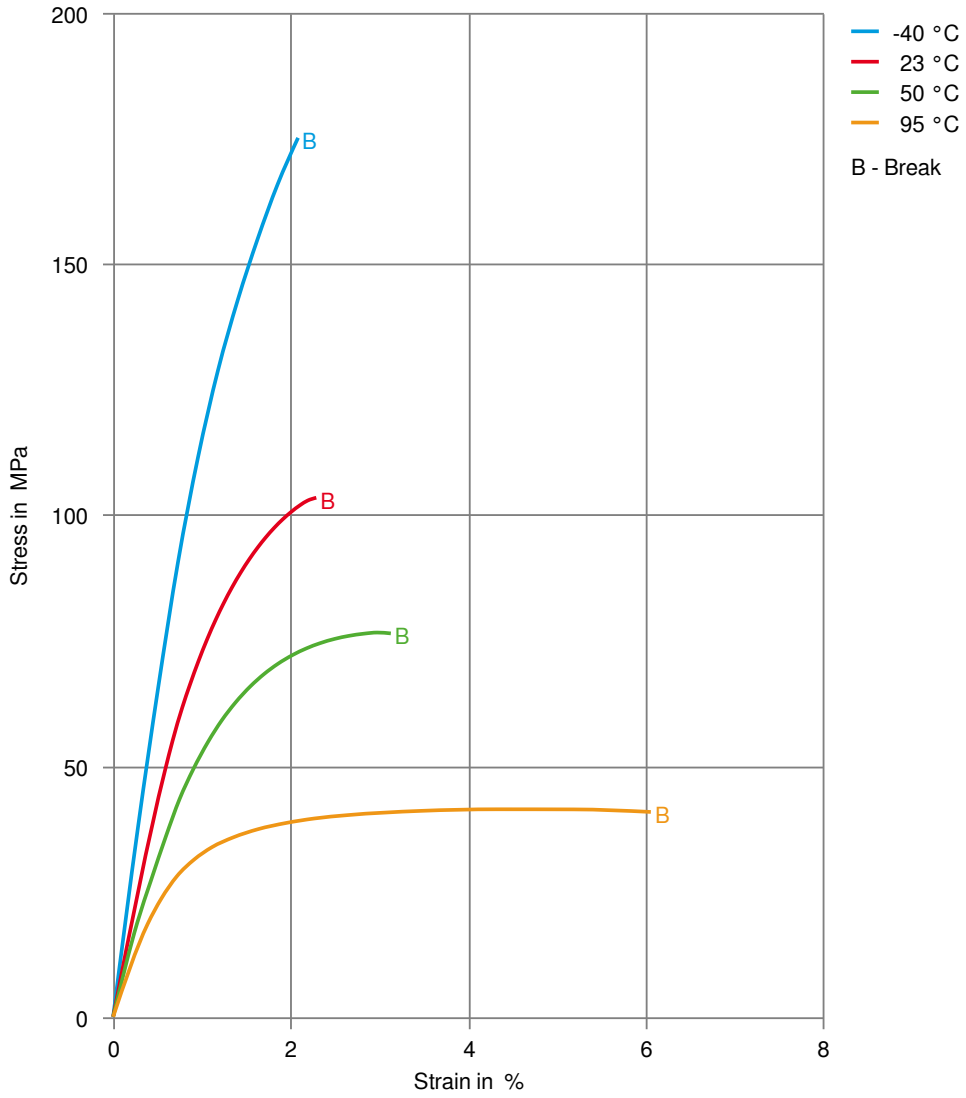
Celanese
The chemistry inside innovation™

TECNOPRENE® AK7HCT

TECNOPRENE®

Renault	UB11, PMR2020, Black (NERO AS9), No Spec, Special Part Approval, See Your CE Account Manager.	
Renault	UB15, PMR2020, Black (Nero AS9), No Spec, Special Part Approval, See Your CE Account Manager.	
VW Group	VW 44045	PP10

Stress-strain

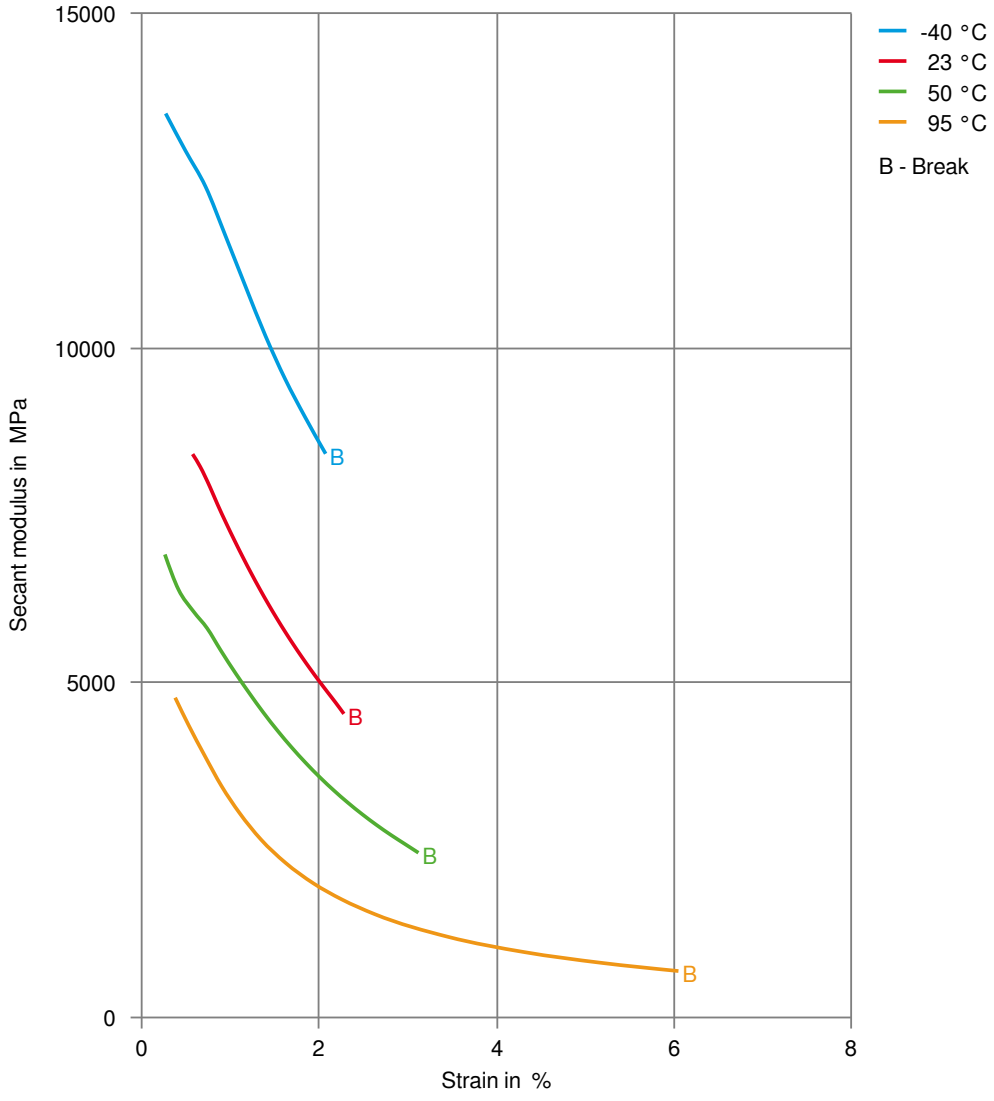


Celanese
The chemistry inside innovation™

TECNOPRENE® AK7HCT

TECNOPRENE®

Secant modulus-strain

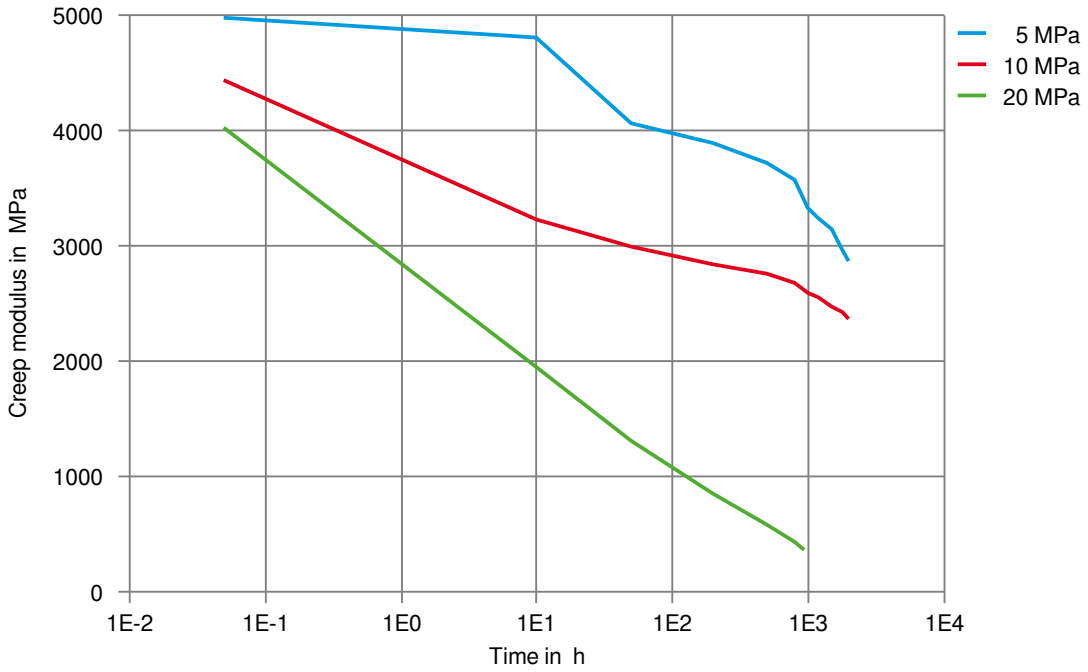


Celanese
The chemistry inside innovation™

TECNOPRENE® AK7HCT

TECNOPRENE®

Creep modulus-time 80 °C

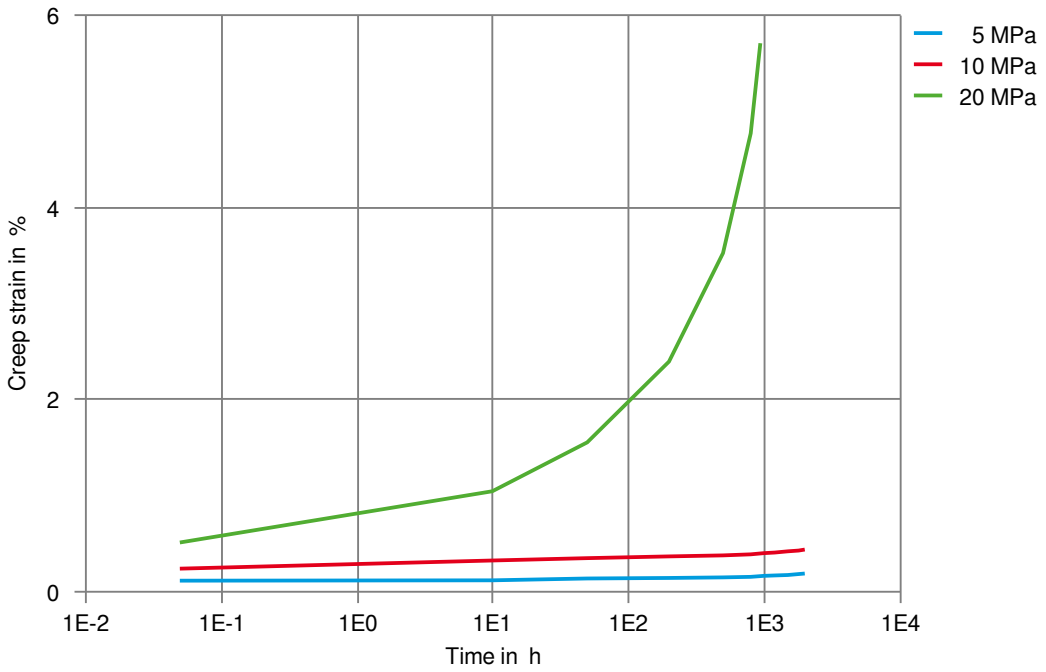


Celanese
The chemistry inside innovation™

TECNOPRENE® AK7HCT

TECNOPRENE®

Creep strain-time 80 °C

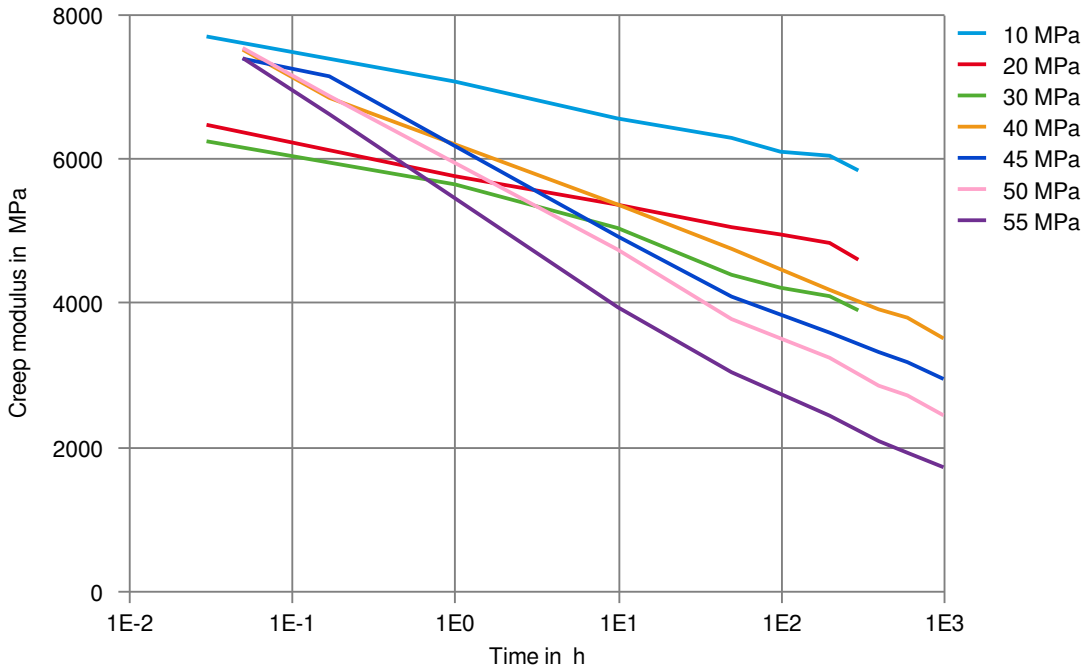


Celanese
The chemistry inside innovation™

TECNOPRENE® AK7HCT

TECNOPRENE®

Creep modulus-time 23 °C

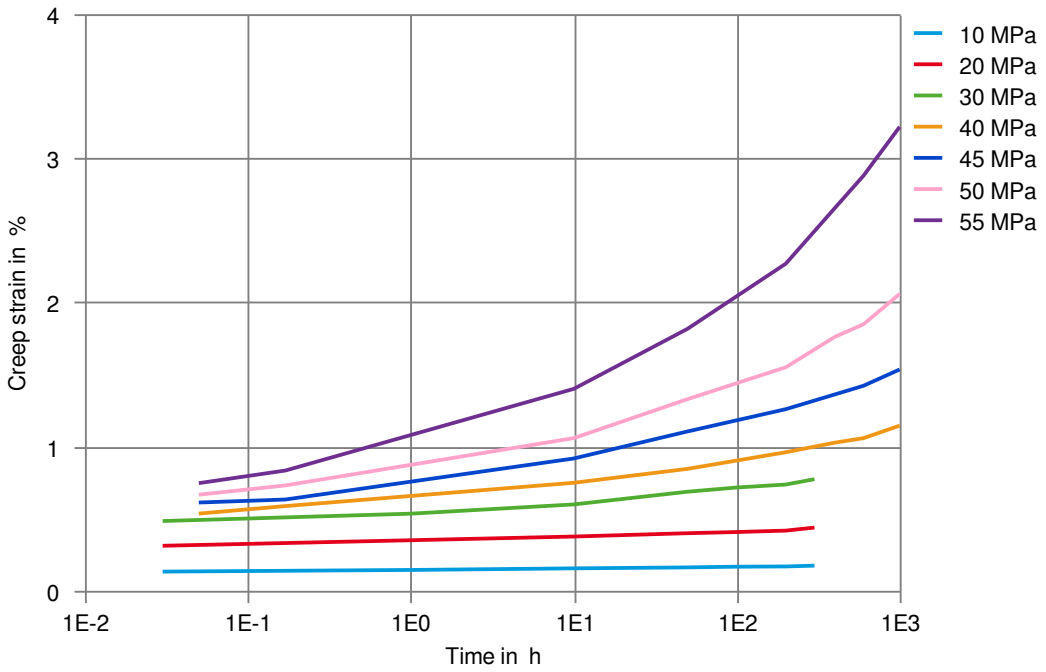


Celanese
The chemistry inside innovation™

TECNOPRENE® AK7HCT

TECNOPRENE®

Creep strain-time 23 °C

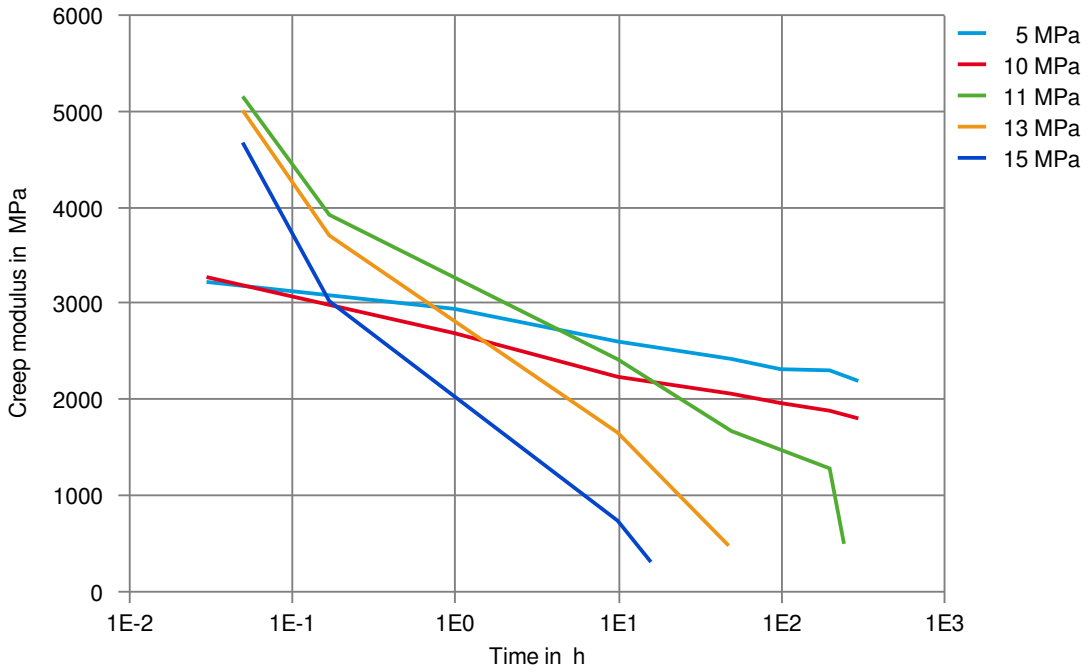


Celanese
The chemistry inside innovation™

TECNOPRENE® AK7HCT

TECNOPRENE®

Creep modulus-time 120 °C

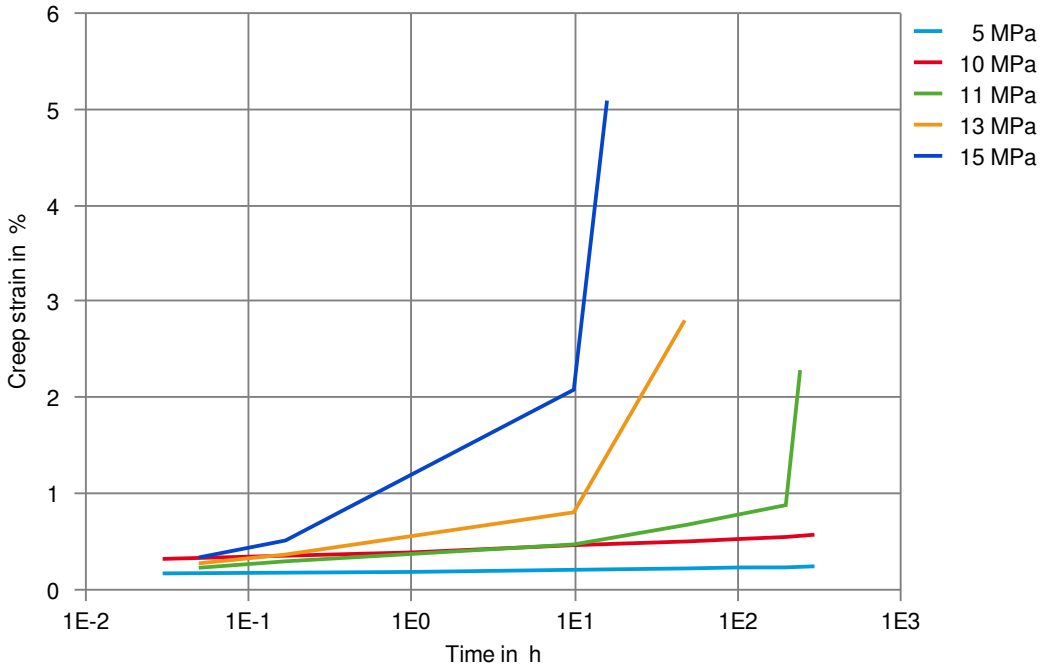


Celanese
The chemistry inside innovation™

TECNOPRENE® AK7HCT

TECNOPRENE®

Creep strain-time 120 °C



Revised: 2025-04-21 Source: Celanese Materials Database