

Essential electrical insulation system (EIS) material solutions



HIGH-QUALITY INSULATION MATERIALS ARE CRUCIAL

All electronic and electrical devices, systems, and products, including large and small appliances, rely on an infrastructure of intricate components such as switches, relays, solenoids, motors, and transformers to perform effectively, using the right materials for these components is critically important in ensuring they operate safely and reliably.

Advanced electronic insulation materials from Celanese are specifically designed to deliver:

- Chemical compatibility across a wide range of temperatures.
- Heat resistance.
- Minimalized risk of electrical failure or fire hazards.



Customers can rely on Celanese for a portfolio of versatile and reliable materials to help guarantee the safety and reliability of electronic and electrical products, devices, and systems used in our homes, workplaces, and cities.

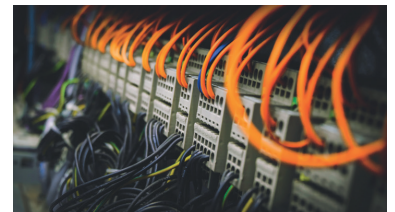


TESTED ELECTRICAL INSULATION SYSTEM (EIS) SOLUTIONS

Electrical Insulation System (EIS) material solutions from Celanese undergo rigorous tests acc. to UL1446 to verify electrical, thermal and chemical compatibility across a wide temperature range, helping to ensure that the materials building the EIS reduce the risks of electrical failure or fire hazards.

Offering over 400 pre-approved EIS materials combined with acknowledged technical expertise, Celanese supports customers in ensuring the development of reliable and safe components that are expedited on time and with reduced product testing costs.

The Celanese EIM portfolio includes trusted brands and industry-accepted products such as Celanex® and Crastin® PBT, Rynite® PET, Zytel® PA and Zenite® LCP, which have helped establish the industry standard for elevated chemical compatibility and the ability to withstand high temperatures for various electrical insulation system (EIS) components.



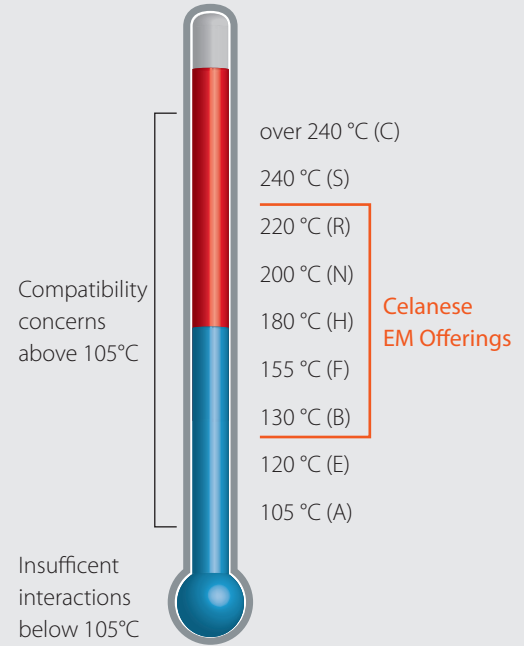
CELANESE KEY SOLUTIONS

With a robust portfolio of thermoplastics and nylon resins, Celanese is ready to partner with manufacturers and suppliers to create reliable and safe electrical components.

Materials	Class 130 (B)	Class 155 (F)	Class 180 (H)	Class 220 (R)
HALOGENATED				
Rynite® PET FR530/FR543/FR945	R150	R250	R340	
Zytel® PA 101L	Z150	Z200		
Zytel® HTN FR52G30BL	LZ100	LZ200		
Zytel® PA 103HSL/70G33HS1L	Z150	Z200		
Crastin® PBT T845FR		CZ200		
Rynite® PET 530/FR530/815ER/830ER	E102N	E200N	E300N	
Rynite PET FR515		CRZ200		
Rynite PET FR530		CRZ200		
Zytel® PA 70G33L/FR50	Z110E	Z250		
Zytel® HTN 51G35HSL	Z180E			
Celanex® PBT 2016	2016(B)	2016(F)		
Celanex® PBT 3116	3116(B)	3116(F)		
Celanex® PBT 3126	3126(B)	3126(F)		
Celanex® PBT 3216	3216(B)	3216(F)		
Celanex® PBT 3226	3226(B)	3226(F)		
Celanex® PBT 3316	3316(B)	3316(F)		
NON-HALOGEN				
Rynite® PET FR533NH	RZ110	RZ200		
Rynite PET FR533NH		CRZ200		
Zytel® HTNFR52G30NH	RZ110	RZ200		
Zytel® PA FR95G25VONH	RZ110	RZ200		
INHERENT FLAME RETRDANT				
Zenite® LCP 6130/L/ECO-B		L200	L301, T301	L500/N
Zenite® LCP 7130/L/ECO-B		L200	L301, T301	L500/N

Applications: Transformers, Invertors, Bobbins, Core Tubes, Motors, Solenoids, Relays, Ground and Interwinding Insulations.

Temperature (Insulation Class)



UL 1446 / IEC 85 ENCAPSULATED INSULATION SYSTEMS

SYSTEM	CLASS	BOBBIN	ENCAPSULANT	MAGNET WIRE
E101, E101N	130 °C / CLASS B	Rynite® PET FR530	Rynite® PET FR530	MW 28,75,79,80
	130 °C / CLASS B	Rynite® PET FR530	Rynite® PET FR530	MW 28,75,79,80
Z180E	130 °C / CLASS B	Zytel® HTN51G35HSL	Zytel® HTN51G35HSL	MW 28,75,79,80
E200, E200N	155 °C / CLASS F	Rynite® PET FR530	Rynite® PET 815 ER	MW 79,80,82,83
	155 °C / CLASS F	Rynite® PET FR530	Rynite® PET 815 ER	MW 79,80,82,83
E300	180 °C / CLASS H	Rynite® PET 530HTE	Rynite® PET 530HTE	MW 35,73,74
		Rynite® PET 830HR	Rynite® PET 830ER	

 **400 pre-approved EIS material solutions**

 **Large temperature range**

 **Chemical resistance**

CUSTOMIZED SOLUTIONS

With ten major Research & Development Centers globally, Celanese collaborates with OEMs, manufacturers and value chain suppliers on the development of customized solutions for electrical insulation products, devices and systems, wherever they are located.

Find out how our application development engineers and specialists can support the development of your next generation of durable, high-performing, and innovative electronic components.

celanese.com

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