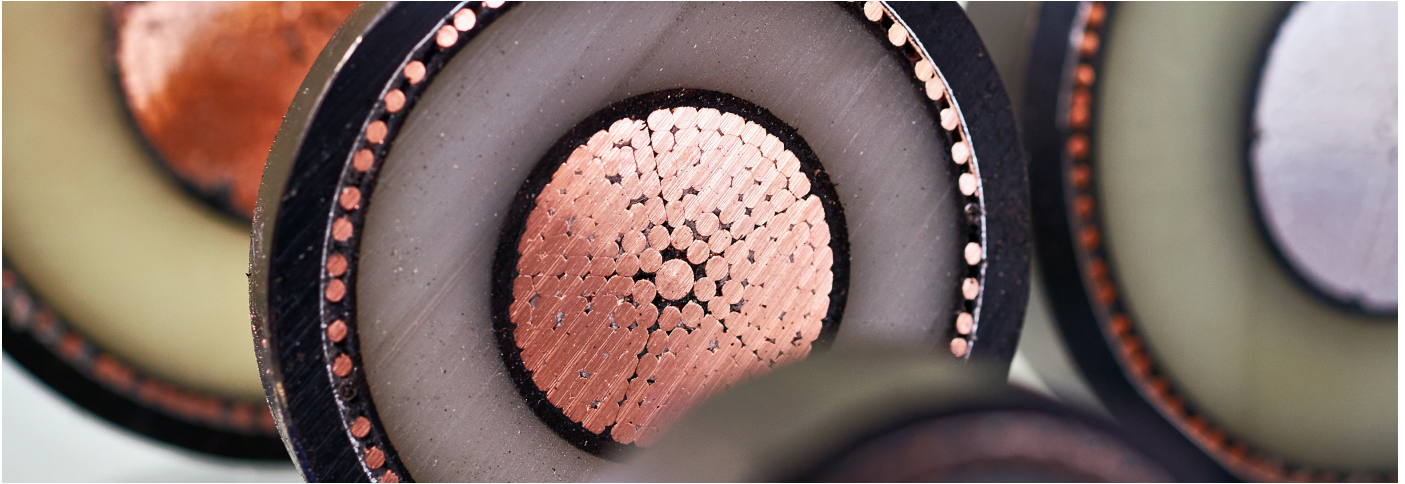


# Catalloy technology reactor grades for wire & cables applications



Grades from LYB's proprietary *Catalloy* technology offer a unique set of properties that can outperform other polymers. They combine the high thermo-mechanical properties of polypropylene with high flexibility. The combination of thermoplastic properties, high temperature performance and flexibility makes grades from *Catalloy* technology a good candidate material for wire and cable applications.

**Catalloy produced grades, like *Hifax CA10A*, *Softell CA02A*, *Hifax CA7441A*, and *Hifax CA7910A* can be used as:**

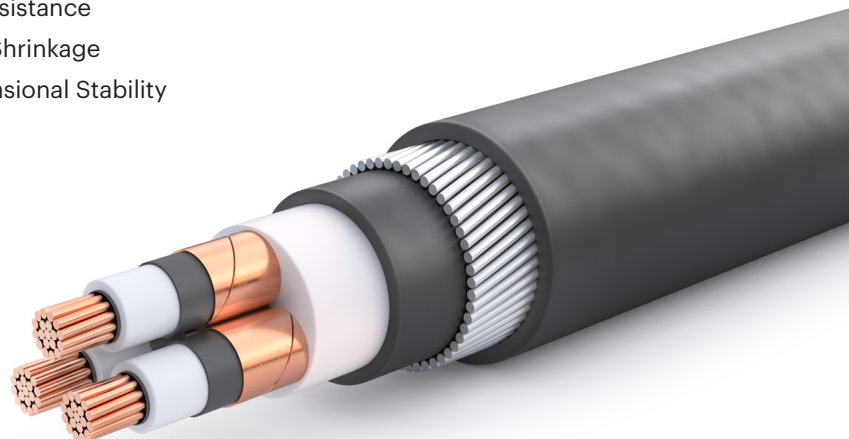
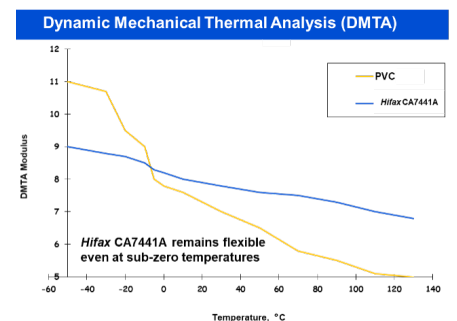
- Building block for:
  - TPO (PP) power cable insulation compounds
  - TPO (PP) semiconductive compounds
  - Non-crosslinked or crosslinked cable compounds (peroxide, silane, e-beam)
  - Low Smoke-Halogen Free- Flame Retardant T3 automotive cable (controlled shrinkage, high processing speed)
- High filler loading compounds
- Component for low temperature resistance for flexible PP jacketing (PVC and PE replacement)
- Softness improver for filled/unfilled PE jacketing compounds (good compatibility)
- High temperature resistant building block in Halogen Free- Flame Retardant HFFR compounds for:
  - Insulation and Jacketing
  - Low Voltage and Medium Voltage cable

**Physical property performance:**

*Catalloy* produced grades create a PP/EPR (Ethylene Propylene Rubber) alloy directly in the polymerization reactors. This results in a very fine and uniform rubber dispersion that allows for optimum:

- Impact/Stiffness Balance
- Thermal Resistance
- Cold Temperature Impact
- Creep Resistance
- Softness
- Toughness
- Tear Resistance
- Puncture Resistance
- Controlled Shrinkage
- Good Dimensional Stability

**Flexibility and Thermal Performance - *Hifax CA7441A***



PROPERTIES	PHYSICAL		MECHANICAL				THERMAL		ELECTRICAL		SPECIFIC PROPERTIES FEATURES	
	Density	MFR 230°C, 2,16kg	Flexural Modulus	Tensile Stress at Break	Tensile Elong. at Break	Shore D Hardness	Tg DMTA	Vicat Softening Temp. 10N	Volume Resistivity	Dielectric Strength		
	23°C											
Test Method	ISO 1183	ISO 1133	ISO 178	ISO 527	ISO 527	ISO 868	Internal Method	ISO 306/ A50	ASTM D2457	ASTM D149		
Units	g/cm <sup>3</sup>	g/10 min	MPa	MPa	%	Points	°C	°C	Ohm-cm	kV/mm		
Softell CA7469A	0.88	0.5	130	7	500	87 (Sh.A)	-40	50	7x10 <sup>16</sup>	47		High Flexibility, Low Tg
Softell CA 02 A	0.88	0.6	30	10	500	75 (Sh.A)	-25	41	9x10 <sup>16</sup>	46		Very high flexibility, filler loading
Hifax CA 10 A	0.88	0.6	90	11	500	30	-25	60	4x10 <sup>16</sup>	46		High flexibility and good tensile performance
Hifax CA 7441 A	0.88	0.8	85	12	500	30	-25	56	3x10 <sup>16</sup>	46		Combination of excellent thermal properties and flexibility
Hifax CA 7910 A	0.88	0.9	160	15	500	34	-25	73	3x10 <sup>16</sup>	46		Dimensional stability, thermal properties and flexibility
Hifax CA 12 A	0.88	0.8	330	13	550	36	-45	78	3x10 <sup>16</sup>	48	Good balance between hardness and thermal properties	
Hiflex CA 7800 A	0.88	1.2	210	11	450	35	-45	85	6x10 <sup>16</sup>	49	Very low Tg, flexibility and thermal resistance	
Hifax CA 7320 A	0.88	2.1	200	10	500	32	-40	62	-	-	Combination of excellent thermal properties and flexibility	
Hifax CA207A	0.89	7.5	550	22	700	46	-35	94	6x10 <sup>16</sup>	48	Low Tg, Low shrinkage	
Hifax CA212A	0.88	8	80	10	600	30	-25	56	3x10 <sup>16</sup>	45	High flexibility and good tensile performance	
Hifax CA 60 A	0.88	15	80	10	600	30	-25	40	3x10 <sup>16</sup>	45	High flexibility and good tensile performance, high flow	

## About us

We are LyondellBasell (LYB) – a leader in the global chemical industry creating solutions for everyday sustainable living. Through advanced technology and focused investments, we are enabling a circular and low carbon economy. Across all we do, we aim to unlock value for our customers, investors and society. As one of the world’s largest producers of polymers and a leader in polyolefin technologies, we develop, manufacture and market high-quality and innovative products for applications ranging from sustainable transportation and food safety to clean water and quality healthcare. For more information, please visit [www.lyb.com](http://www.lyb.com) or follow [@LyondellBasell](https://www.linkedin.com/company/lyondellbasell) on LinkedIn.

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