

Catalloy technology reactor grades for Wire and Cable applications



Grades from *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*, and *Hifax CA7441A* can be used as:

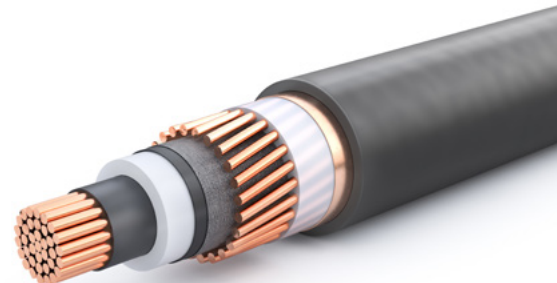
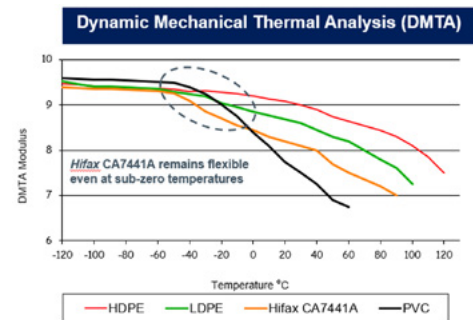
- Component for low temperature resistance for flexible PP jacketing (PVC and PE replacement)
- Softness improver for filled/unfilled PE jacketing compounds (good compatibility)
- High temperature resistant building block in Halogen Free- Flame Retardant compounds for:
 - Insulation and Jacketing
 - Low Voltage and Medium Voltage cable
- Building block for:
 - 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

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*



Product Selection Guide

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	Tm	Volume Resistiv- ity	Dielectric Strength	
	23°C	ISO 1133	ISO 527	ISO 527	ISO 527	ISO 868	Internal Method	ISO 306/ A50	ISO 11357-3	ASTM D257	ASTM D149	
Test Method	ISO 1183	ISO 1133	ISO 527	ISO 527	ISO 527	ISO 868	Internal Method	ISO 306/ A50	ISO 11357-3	ASTM D257	ASTM D149	
Units	g/cm ³	g/10 min	MPa	MPa	%	Points	°C	°C	°C	Ohm-cm	kV/mm	
Softell CA7469A	0.88	0.5	130	7	500	87 (Sh.A)	-40	50	142	7x10 ¹⁶	47	High Flexibility, Low Tg
Softell CA 02 A	0.88	0.6	30	10	500	75 (Sh.A)	-25	41	142	9x10 ¹⁶	46	Very high flexibility, filler loading
Hifax CA 10 A	0.88	0.6	90	11	500	30	-25	60	142	4x10 ¹⁶	46	High flexibility and good tensile performance
Hifax CA 7441 A	0.88	0.8	85	12	500	30	-25	56	163	3x10 ¹⁶	46	Combination of excellent thermal properties and flexibility
Hifax CA 12 A	0.88	0.8	330	13	550	36	-45	78	163	3x10 ¹⁶	48	Good balance between hardness and thermal properties
Hiflex CA 7700 A	0.88	1.4	170	10	450	33	-45	75	142	6x10 ¹⁶	49	Very low Tg, flexibility and thermal resistance
Hiflex CA 7800 A	0.88	1.2	210	11	450	35	-45	85	163	6x10 ¹⁶	49	Very low Tg, flexibility and thermal resistance
Hifax CA 7320 A	0.88	2.1	200	10	500	32	-40	62	163	-	-	Combination of excellent thermal properties and flexibility
Hifax CA207A	0.89	7.5	550	22	700	46	-35	94	163	6x10 ¹⁶	48	Low Tg, Low shrinkage
Hifax CA212A	0.88	8	80	10	600	30	-25	56	142	3x10 ¹⁶	45	High flexibility and good tensile performance
Hifax CA 60 A	0.88	15	80	10	600	30	-25	40	56	3x10 ¹⁶	45	High flexibility and good tensile performance, high flow

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