

The halogen free solution for wire and cable

Arnitel XG answers the need of the green revolution for more sustainable wire and cables

Solution for wire and cable

Arnitel XG is the perfect halogen free solution for wire and cable. Arnitel XG offers excellent mechanical performance as proved by the UL compliance. Arnitel XG can be processed on machines and tools used for extrusion of PVC or Polyolefin's and there is no additional investment or skill upgrading needed to produce cable with Arnitel XG.

Cable and Wire Applications

Arnitel XG is designed for wire and cable solutions for consumer electronics.



Key properties

The Arnitel XG portfolio offers a range of grades, suitable for different wire and cable solutions.

Material Name	Application	Flammability Rating		Hardness (Shore A)	TS Mpa	EAB%
		0,8	1,6			
XG5855	AC cable insulation DC Jacket, Strain Relief	V2	V2	86	8,8	368
XG5857	AC cable Jacket, Strain Relief	V2	V2	86	10,3	425
XG6029	AC, DC, Data cable Jacket, Strain Relief	V2	V2	86	10	424
XG5858	Strain Relief	V2	V2	82	9,5	654
Xo6078	Strain Relief	V2	V2	75	5,5	492

Arnitel XG has a volume resistivity of more than 10^{13} .

Arnitel XG offers a sustainable solution during the complete lifecycle. Arnitel does not use plasticizers. Plasticizers suspected of endangering health and environment. Furthermore Arnitel releases no carcinogenic compounds to the environment during manufacturer, use or disposal. When incinerated no dioxins are released, resulting in no hazard for the occupants or fire fighters in case of a building fire or accident.



Cables made of Arnitel XG have the following properties:

- Halogen free
- Free of restricted substances (RoHS compliant)
- No Plasticizer, Phthalate Free
- Comply to generic designs and test requirements of regulatory agents i.e. UL (UL62, UL 758, and UL 1581)
- Excellent flame retardancy VW1 for insulation and jackets, even on thin cables (2mm)
- Wide range of temperature resistance (-40°C ~150°C)
- Excellent temperature ratings (up to 105°C)
- Very good chemical resistance in combination with very high mechanical properties
- Good color stability
- Excellent UV stability
- Available in hardness range from 65A to 90A



Meeting Cable Standards

Arnitel XG complies to the UL62 standard's generic test plan specified for TPE resins. Arnitel XG also meets the UL758 and complies to the test procedure in accordance to UL1581. It falls under the TPE category and class 36.

General Tests	conditions	results
Heat Ageing	136°C, 168H	Min 80% retention of tensile values
Insulation resistance	Tested in water, 25°C, 500V	50MΩ.Km
Insulation resistance	Tested in water, 70°C, 500V	0.2MΩ.Km
Dielectric strength	Tested in water, 25°C, 5 minutes min.	No break down
Spark test	5KV	No break down
Deformation	2Kgs @150 °C (UL1581)	30% max
Cold bend	-20 °C (UL1581)	No cracks
Heat Shock	150 °C (UL 1581)	No cracks
Flammability	UL1581	VW-1

Possible applications of Arnitel XG are:

- Cable jackets for AC, DC and data cables
- Cable insulation for AC and DC cables
- Strain relief for cables
- Over molding applications

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