

PRODUCT NEWS

Casico™ FR6082 (black) FR6083 (natural)

Tough, flame retardant jacketing



BOREALIS

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Meeting new needs for flame retardant jacketing of energy cables

Fires in buildings or advanced installations can either be fatal or cause considerable financial losses. By using halogen-free flame retardant cable jacketing, the severe consequences of such fires can be greatly reduced. This is broadly recognised by the utility industry and cable standards are continuously being developed to meet the need for improved reliability and safety. The well known Casico technology employed for cable insulation and jacketing is known to release only low levels of smoke with low toxicity, allowing people to find an escape route. Secondary construction and equipment damage is reduced due to the absence of halogens.

Casico FR6082 (black)/FR6083 (natural) is a further development of the Casico product family for jacketing of energy cables designed to meet the requirement of mechanical toughness and flame retardant performance free from halogens.

Casico technology is based on a concept involving the elements carbon, hydrogen, oxygen, silicon and calcium. Both products are UV protected.

Benefits

The key flame retardant features known from Casico technology, in combination with mechanical toughness, offer the following benefits essential for jacketing of energy cables:

- High physical strength and toughness
- UV protected
- Easy to process
- Halogen-free
- Flame retardant
- Low temperature flexibility for installation also at low temperatures



Physical properties

Property	Unit	Typical value	Test method
Density	kg/m ³	1,200	ISO1872-2/ISO1183-D
Durometer hardness – Shore D (15 sec)	–	53	ISO868
Tensile strength at break	MPa	13.5	IEC 60811-1-1
Elongation at break	%	>450	IEC 60811-1-1
Tear resistance	N/mm	12.5	ASTM D470
Limited oxygen index	%O ₂	29	ISO4589-A-IV/ISO5660
Pressure test			
110 C – 6 h	%	8	IEC 80811-3-1
105 C – 6 h	%	6	IEC 80811-3-1
Vertical burning		Pass	IEC 60332-1

Specifications

- HD 603 S1
- IEC 60502 ST₇
- IEC 60840 ST₃, ST₇
- IEC 62067 ST₃, ST₇

Borealis and Borouge polyolefin solutions are bringing energy all around

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About Borealis Borealis is one of the world's leading providers of advanced and circular polyolefin solutions and a European market leader in base chemicals, fertilizers and the mechanical recycling of plastics. We leverage our polymers expertise and decades of experience to offer value adding, innovative and circular material solutions for key industries. In re-inventing for more sustainable living, we build on our commitment to safety, our people and excellence as we accelerate the transformation to a circular economy and expand our geographical footprint.

With head offices in Vienna, Austria, Borealis employs 6,900 employees and operates in over 120 countries. In 2021, Borealis generated total sales and other income of EUR 10,153 million and a net profit of EUR 1,396 million. OMV, the Austria-based international oil and gas company, owns 75% of Borealis, while the remaining 25% is owned by a holding company of the Abu-Dhabi based Mubadala. We supply services and products to customers around the globe through Borealis and two important joint ventures: Borouge (with the Abu Dhabi National Oil Company, or ADNOC, based in UAE); and Baystar™ (with TotalEnergies, based in the US).

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