



HFFR-JKT-DEV

Halogen-Free Flame-Retardant Cable Jacket — R&D Platform

PRELIMINARY ENGINEERING DATA

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OWNER TECHNICAL & R&D
STATUS CONTROLLED DEVELOPMENT DATA

PRODUCT OVERVIEW

An internal HFFR cable-jacket R&D platform. It must not be labelled LSZH or certified from compound LOI/mechanical data; flame spread and smoke are properties of the complete cable construction. Applications: Fibre-optic cable jacket; Building and transit cable sheath; Industrial control cable. Key features: Halogen-free formulation target; High oxygen-index target; Low-smoke development platform.

PRELIMINARY TECHNICAL PROPERTIES

PROPERTY / CONDITION	TEST METHOD	PROVISIONAL VALUE	UNIT
Melt flow rate, 190°C/2.16 kg	ISO 1133-1	0.4-1.0	g/10 min
Density	ISO 1183-1	1.60-1.68	g/cm³
Tensile strength	IEC 60811-501 / agreed cable standard	≥ 10	MPa
Elongation at break	IEC 60811-501 / agreed cable standard	≥ 125	%
Hardness	ISO 868	54-60	Shore D
Brittleness temperature	ASTM D746	≤ -25	°C
Oxygen index	ISO 4589-2	≥ 40	%
Single/bunched cable flame propagation	IEC 60332 series; complete cable	To named cable requirement	
Smoke density	IEC 61034-2; complete cable	To named cable requirement	
Halogen acid gas / acidity / conductivity	IEC 60754-1 and IEC 60754-2	To named cable requirement	

QUALIFICATION & USE

- Values are development targets, not a sales specification or certificate of analysis.
- Final limits require independent production-lot validation using the cited methods and controlled specimen preparation.
- Regulatory, food-contact, medical, UL, IEC, ATEX or OEM compliance applies only when confirmed in a grade-specific document.