



Product description

Polyolefin based thermoplastic compound containing a fire retardant system that contributes to give the cable self-extinguish properties without halogenidric acids evolution; furthermore, toxic and corrosive gases emission and smoke generation are particularly reduced. These characteristics make this compound suitable in all applications where the fire behavior of cable materials is one of the main concerns to be considered in establishing a high safety level in public places.

Cogegum AFR/920 UV contains an anti-UV system to impart UV/VIS protection

Application: W&C insulation and sheathing

Standard complying

EN 50363-0 M1/M16 and M9; EN 50363-7 T17; IEC 60502-1 ST8; VDE 0207 HM2, HM 4, HM5 and HJ2; BS 7655 LTS1, LTS2, LTS3 and LTS4; BS6724; IEC 60092 SHF1; UNE 211002 TIZ1; UNE 21123-4.

Burning behavior to be assessed accordingly to performances required by specific cable construction

Availability

Africa & Middle East, Asia Pacific, Europe

Verify commercial availability and registration status in each country with local sales representative

Typical properties ⁽¹⁾	nominal value	unit	test method
Physical			
Density at 23°C	1.43	g/cm ³	ASTM D792
Melt Flow Index, 190°C/21.6 kg	18	g/10'	internal method
Water adsorption, 24 hours at 100°C	1.00	mg/cm ²	EN 60811
Hardness, Shore D	50	-	ISO 868
Mechanical			
Tensile Strength at break	14.5	MPa	EN 60811
Tensile Elongation at break	190	%	
Thermal			
Hot Pressure Test at 90°C/K=0.6, max. penetration	<50	%	EN 60811
Bending Test at -25°C	Pass	-	EN 60811
Cold impact at -25°C	Pass	-	EN 60811
Heat shock at 150°C	Pass	-	EN 60811
Ageing			
Mechanical properties after ageing in Air Oven, 80°C/168 hours			
change in Tensile Strength	+5	%	EN 60811
change in Tensile Elongation	-15	%	
Mechanical properties after ageing in Air Oven, 110°C/168 hours			
change in Tensile Strength	+10	%	EN 60811
change in Tensile Elongation	-12	%	
Mechanical properties after UV/VIS exposure, 65°C/750 hours ⁽²⁾			
change in Tensile Strength	0	%	ISO 4892-2/ A
change in Tensile Elongation	-7	%	

	nominal value	unit	test method
Chemical resistance			
SAE 20 Oil Immersion Test, 70°C/ 4 hours			
change in Tensile Strength	+15	%	EN 60811
change in Tensile Elongation	-8	%	
Water Immersion Test, 70°C/168 hours			
change in Tensile Strength	-18	%	BS 6469
change in Tensile Elongation	-13	%	section 99.1
Environmental Stress Cracking Resistance			
Condition A, 50°C, 3.00 mm, 10% Igepal	>1000	hours	ASTM D1693
Electrical			
Volume Resistivity at 20°C	8.1 E+14	Ω x cm	IEC 60502
Volume Resistivity at 70°C	5.4 E+12	Ω x cm	
Insulation Resistance Constant at 20°C	3000	MΩ x km	IEC 60502
Insulation Resistance Constant at 70°C	200	MΩ x km	
Burning properties			
Limiting Oxygen Index	37	%	ASTM D2863
Temperature Index	280	°C	NES 715
Calorific Potential, upper (gross)	18	MJ/kg	ISO 1716
Corrosive Gas in Smoke			
conductivity	< 2.5	μS/mm	IEC 60754-2
pH	> 4.3	-	
Halogenidric Acid Emission	< 0.1	%	IEC 60754-1

Notes:

⁽¹⁾ Typical properties are not to be construed as specification. Tests reported are performed on pressed or extruded specimens.

⁽²⁾ 50% RH, irradiance 0.51 W/m² at 340 nm

Additional information

The product must be stored under the following conditions:

- closed and undamaged bags
- ambient temperature not exceeding 30°C
- avoid direct exposure to sunlight and weathering

Product alterations could occur due to extended period of storage; shelf life: 12 months

Padanaplast S.r.l accepts no liability of any kind in case the above mentioned conditions are not fulfilled

Packaging

- 1000 kg carton box

Processing information

Extruder temperature setting:

barrel zone 1	130 to 150 °C
barrel zone 2	130 to 170 °C
barrel zone 3	160 to 180 °C
barrel zone 4	170 to 180 °C
collar	170 to 180 °C
crosshead	180 to 190 °C
die	180 to 200 °C

Extrusion notes:

Extrusion equipment

- standard extruders for thermoplastics equipped with low compression screw (1.2÷1.4 compression ratio and 25 L/D ratio) are suggested
- don't use screw thermoregulation
- filter net: normally not necessary
- compression or semi-compression tools are suggested; if tubing tools must be used, D.D.R. should not exceed 1.5

Coloring

- EVA or PE based color masterbatches added at 1.2-1.5% by weight are suggested.

Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

Neither Padanaplast S.r.l. nor any of its affiliates makes any warranty, express or implied, including merchantability, fitness for use or accepts any liability in connection with this product, related information or its use. The use of this product is not subject to our direct control, therefore, the user alone must finally, under his own responsibility, determine suitability of any information or products for any contemplated use in compliance with applicable law, the manner of use and whether any patents are infringed. The products are for use by technically skilled persons, with adequate training on how to use chemical products, at their own discretion and risk. The information provided does not relate to the use of this product in combination with any other substance or any other process. In no event Padanaplast S.r.l. will be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information.

Padanaplast S.r.l. makes no representation or warranty, express or implied, that the use of Information will not infringe any patent. This is not a license under any patent or other proprietary right. All trademarks and registered trademarks belong to Finproject S.p.A., A Versalis (Eni) Company.

©Padanaplast S.r.l. 2022. All rights reserved.

www.padanaplast.com

info@padanaplast.com