



## 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 AFR1909-52 UV EXP contains an anti-UV system to impart UV/VIS protection

Application: W&C insulation and sheathing

## Standard complying

IEC 60840 ED 5 ST12

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

## Availability

Africa & Middle East, Asia Pacific, Europe, Latin America

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

Typical properties <sup>(1)</sup>	nominal value	unit	test method
<b>Physical</b>			
Density at 23°C	1.39	g/cm <sup>3</sup>	ASTM D792
Melt Flow Index, 150°C/21.6 kg	3.6	g/10'	internal method
Water adsorption, 14 days at 85°C	0.3	mg/cm <sup>2</sup>	EN 60811
Hardness, Shore D	48	-	ISO 868
<b>Mechanical</b>			
Tensile Strength at break	15.8	MPa	EN 60811
Tensile Elongation at break	420	%	
Shrinkage test at 80°C 5 hours 5 cycles			EN 60811
Maximum shrinkage	< 3	%	
Tear Strength at 23°C (1.0 mm thickness)	19.9	N/mm	BS 6469
<b>Thermal</b>			
Hot Pressure Test at 110°C/K=0.7, max. penetration	< 50	%	EN 60811
Hot Pressure Test at 115°C/K=0.7, 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
<b>Ageing</b>			
Mechanical properties after ageing in Air Oven, 110°C/240 hours			
change in Tensile Strength	1	%	EN 60811
change in Tensile Elongation	-5	%	
Tensile Elongation at break after ageing	397	%	

	nominal value	unit	test method
<b>Chemical resistance</b>			
Environmental Stress Cracking Resistance Condition A, 50°C, 3.00 mm, 10% Igepal	pass	hours	ASTM D1693
<b>Burning properties</b>			
Limiting Oxygen Index	30	%	ASTM D2863
Temperature Index	280	°C	NES 715
Corrosive Gas in Smoke conductivity	< 2.5	μS/mm	IEC 60754-2
pH	> 4.3	-	
Halogenidric Acid Emission	< 0.1	%	IEC 60754-1

**Notes:**

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

## 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

- 25 kg moisture-resistant bags on 1375 kg pallet
- 1000 kg carton box

## Processing information

### Extruder temperature setting:

barrel zone 1	140 to 150 °C
barrel zone 2	150 to 160 °C
barrel zone 3	160 to 160 °C
barrel zone 4	170 to 170 °C
collar	170 to 180 °C
crosshead	170 to 180 °C
die	170 to 180 °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
- 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](http://www.padanaplast.com)

[info@padanaplast.com](mailto:info@padanaplast.com)