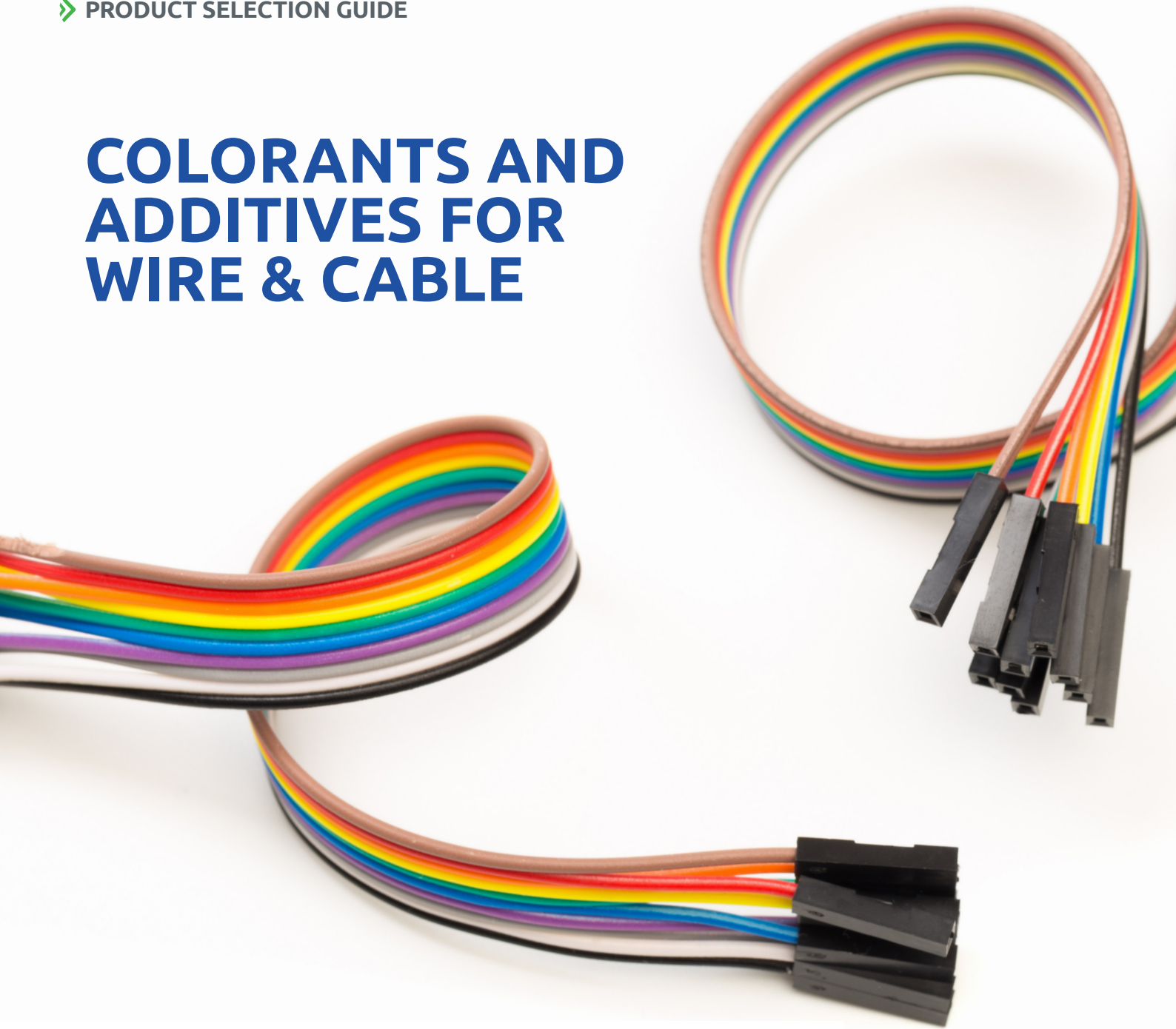


COLORANTS AND ADDITIVES FOR WIRE & CABLE



ONCOLOR™ COLORANTS FOR WIRE & CABLE

OnColor™ Colorants for wire & cable offer a comprehensive range of color series, covering the diverse specifications demanded by the cable industry. These colorants are designed for a wide variety of applications, in line with RAL, IEC 304, BS 6746C and AFNOR (Association Française de Normalisation) color requirements. The pigments and the overall formulations have been selected for optimum color incorporation and cable performance.

In addition to color series, custom solutions can be developed to fulfil specific application requirements. These include enhanced light resistance, high temperature resistance, ageing test resistance, low shrinkage, and many other performance criteria that can be required in the final application.

OnColor Colorants for wire & cable are heavy metal free and compliant with the RoHS Directive 2015/863/CE.

APPLICATION	DESCRIPTION
PVC General Purpose Cable	<ul style="list-style-type: none"> • Optimal incorporation in PVC formulations • Non ortho-phthalate range available
PVC Automotive Cable	<ul style="list-style-type: none"> • Optimized colors for T2 and T3 automotive applications • Non ortho-phthalate range available
Unfilled PE, XLPE, PP Cable	<ul style="list-style-type: none"> • Specific color range for unfilled polyolefins • Compatibility with cross-linkable systems • Special range to minimize shrinkage or for thin skin applications
Filled Polyolefins, Non-Halogenated Flame Retardant PE Cable	<ul style="list-style-type: none"> • Full range of colors, halogen-free or low amounts of halogens • Designed for incorporation into various non-halogenated flame retardant formulations
PE Visico/Ambicat™ Crosslinked Polyethylene ¹	<ul style="list-style-type: none"> • Full range of colors for PE Visico/Ambicat™ cross-linked polyethylene • Specifically designed and tested to ensure compatibility with this cross-linking method
Thermoset Rubber Cable	<ul style="list-style-type: none"> • Colors designed for use with thermoset rubber • Fully compatible with vulcanization process
Unfilled TPU Cable	<ul style="list-style-type: none"> • Color range for unfilled polyester or polyether TPU • Provides good opacity at low addition levels
Flame Retardant TPU Cable	<ul style="list-style-type: none"> • Color range for filled/non-halogenated flame retardant TPU • Provides good color strength
TPE Cable	<ul style="list-style-type: none"> • Color range designed to enhance performance of various TPE brands • High temperature range available
PA Cable	<ul style="list-style-type: none"> • Different color ranges available depending on the polyamide type and the application
PBT Cable	<ul style="list-style-type: none"> • PBT color range mostly used in optical fiber, loose tube or tight buffered cables • Selection of pigments to prevent migration of color in gel-filled materials

¹ Visico/Ambicat™ Crosslinked Polyethylene is a trademark of Borealis

ADDITIVE SOLUTIONS FOR WIRE & CABLE

Avient offers a wide range of additives to meet wire and cable industry requirements. They are designed to provide manufacturing efficiency, enhance performance by providing additional cable features, and meet end user specifications.



PRODUCT RANGE	ADDITIVE BENEFITS & PERFORMANCE
Thermal Stabilizers	
Cesa™ Nox™ Antioxidant Additives	Improves thermal resistance or reduce polymer degradation during processing. Helps pass cable standards relating to thermal ageing tests. Extends cable lifetime. Improves flexibility: freedom to select the main polymer.
UV Light Stabilizers	
Cesa™ Light Additives	Long-term protection against weather degradation. Extends cable lifetime. Improves flexibility: freedom to select the main polymers for the cable jacket.
Blowing Agents	
Hydrocerol™ Chemical Foaming Agents	Blowing agents to improve electrical performance, suitable for chemical or physical processing. Helps reduce the quantity of raw material used, and the weight of the cable. Full range of ADCA or ADCA free solutions.
Brominated Flame Retardants	
Cesa™ Flame Retardant Additives	Provide efficient flame retardancy across a variety of resins. Compatible with Ambicat™ cross-linking technology. Allows cable to pass flame retardant tests. Solutions available for polyolefins and TPU.
Additives for Laser Marking	
Cesa™ Laser Additives	Enhances marking contrast when laser technology is used. Highly durable marking with good resistance to friction and scratches. Eliminates use of consumables, such as inks and solvents.
Processing Aids	
Cesa™ Process Additives	Improves manufacturing efficiency: increase output, reduce die build-up.
Crosslinking Agents	
Cesa™ Dry Silane Additives for Wire & Cable	Silane cross-linking agents in solid form for use with extrusion equipment, for easy handling. Helps to minimize manufacturing investment while optimizing cross-linking benefits e.g., better thermal resistance. Suitable for polyethylene and flame retardant polyolefin formulations.
Repellant Additives	
Cesa™ Aversive Technology	Long-term protection against rats and termites. Extremely low-concern and long-lasting active substances. Compliant with the EU Biocidal Product Regulation (BPR).
Color and Additive Combinations	
Smartbatch™ Combination Colorants and Additives	Combines custom or standard colors with a performance-enhancing or functional additive in one pellet. Improves traceability as the color indicates the additive has also been added. Reduces material inventory and allows the use of general purpose resins.



AVIENT WIRE & CABLE CAPABILITIES

We have manufacturing facilities and innovation centers located worldwide, allowing us to collaborate with you in order to understand your objectives and offer the necessary expertise to transform your vision into reality. Our collaborative process affords you flexibility in polymer design and access to a range of world-class services, with the ability to meet regulatory and product specifications globally.

Avient, as a global polymer solutions provider, offers a wide range of polymer-specific specialty colorant and additives systems for the wire and cable industry. In addition, we can provide other specialty formulations for cable applications such as:

- Colorant Chromatics™ Fluoropolymers And High Temperature Colorants
- ECCOH™ Low Smoke and Fume Non-Halogen Formulations for cable insulation and jackets
- Syncure™ XLPE Cross-linkable Polyethylene Formulations for power cable insulation
- Maxxam™ FR Formulations for wire and cable

With our long history of providing high-quality products and total polymer solutions to the wire and cable industry, we are uniquely positioned as a single source provider of customized solutions for polymer processors serving virtually any market.

**The following colors are available in all ranges with short-term delivery.
Main RAL colors correspond to BS and/or Afnor colors.**



RAL 1021 - BS/IEC 304
Afnor A-330



RAL 2003



RAL 3000 - BS/IEC 304
Afnor A-805



RAL 5015 - BS/IEC 304



RAL 6018 - BS/IEC 304



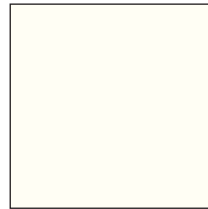
RAL 8003



RAL 7000 - Afnor A-625



RAL 9005 - BS/IEC 304
Afnor A-603



RAL 9010 - BS/IEC 304
Afnor A-665

For certain ranges, the following colors are also available for short-term delivery.



RAL 3015 - Afnor A-870



RAL 4005 - Afnor A-730



RAL 6027 - BS/IEC 304



RAL 7032



BS/IEC 304
(Dark Grey)



RAL 7035 - BS/IEC 304
(Light Grey)



RAL 6016 - Afnor A-445



RAL 6024 - Afnor A-460



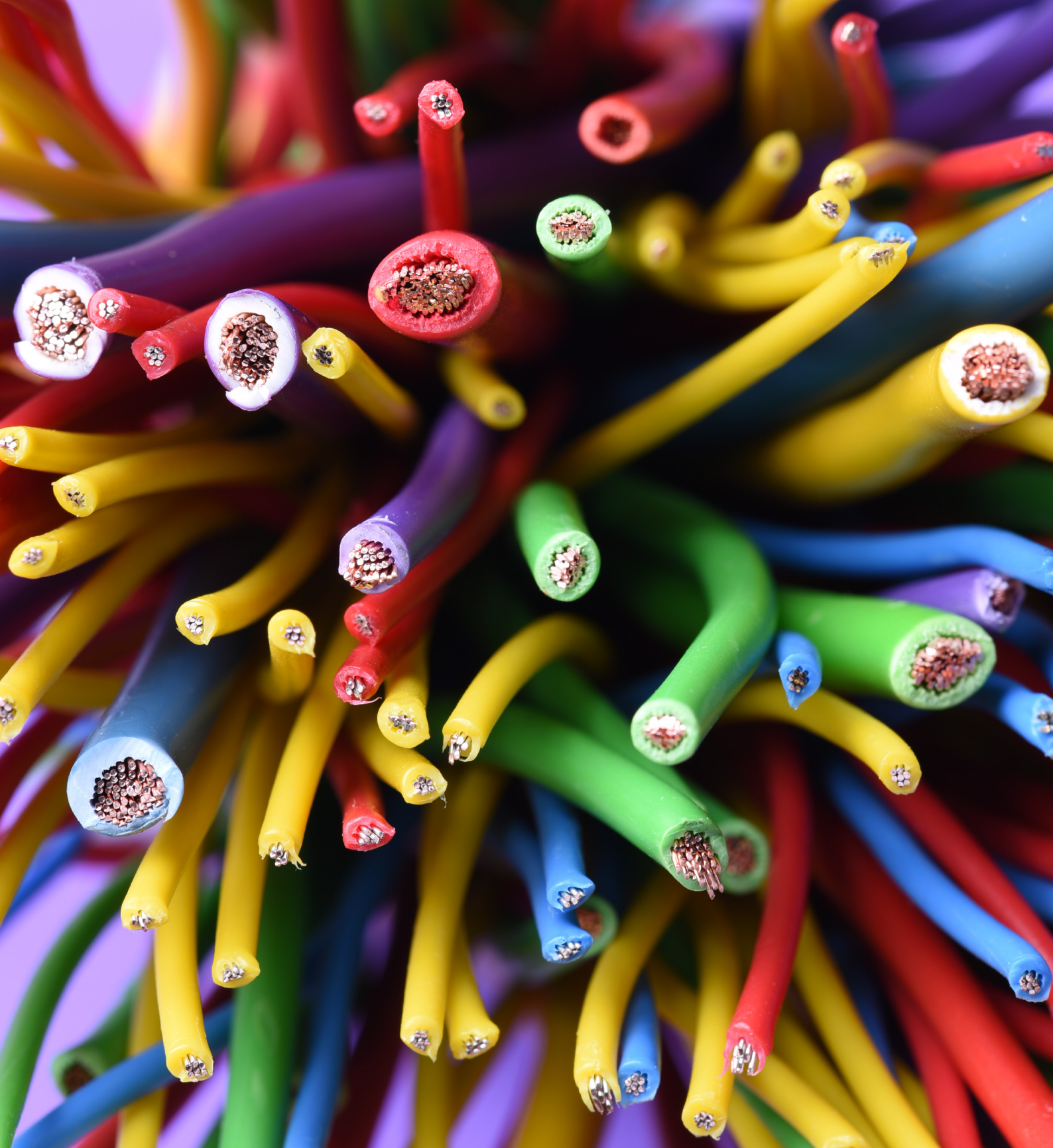
Afnor A-571
(Light Blue)



RAL 2004 - BS/IEC 304



RAL 8002 - BS/IEC 304



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