



» PRODUCT BULLETIN

OnColor™ NIR Sortable Colorants Near Infrared Sortable Black and Dark Colorants for Recyclable Packaging

OnColor™ NIR Sortable Black and Dark Colorants for recyclable packaging promotes correct sorting and recycling of dark polymers. This solution permits black and dark color polymers to be detected by near infrared (NIR) automatic sorting equipment, enabling subsequent recycling. OnColor NIR sortable colorants are available in a range of dark tones, including blacks, and can also be customized to support the needs of brand owners, allowing dark packaging to remain an option for current products.

THE LURE & COMPLEXITY OF DARK PACKAGING SHADES

Dark packaging has always been a popular choice by brand owners and is therefore widely used across different applications and packaging types.

It is well known that detection and sorting of black or dark packaging in material recovery facilities is a complex issue affecting the packaging and recycling industries extensively. Automatic sorting equipment in waste facilities relies on the reflectance of NIR wavelengths to identify polymers and properly sort packaging waste by plastic material. Some formulations used to color black and dark colored packaging absorb the wavelengths so darker polymers can't be identified, inevitably keeping some packaging out of recycling streams at considerable cost to our environment.

OnColor NIR sortable black and dark colored solutions have been formulated to ensure black and dark packaging is detectable by current waste sorting equipment. The formulation used enables black packaging of various polymers to be sorted into the correct polymer stream, and sent for recycling instead of landfill or incineration, which is a key requirement of the circular economy system. Avient works with leading equipment and technology partners to achieve best-in-class solutions for circular economy requirements.

KEY CHARACTERISTICS

- Customized sortable black and dark colors upon request
- Solid or liquid form
- Suitable for PET, polyolefins and PCR
- Processes: extrusion, injection, thermoforming
- Coloration strength & dispersion quality, similar to conventional black masterbatch
- Very good processability
- Competitive Let-Down Ratio (LDR), depending on applicable standards, part-geometry, added ingredients
- Food contact approval documentation available upon request

APPLICATIONS

OnColor NIR Sortable Colorants can benefit the following stakeholders operating within the packaging industry:

- Retailers
- Brand Owners
- Convertors
- Recycling Facilities
- Packaging Recovery Organizations

GLOBAL APPROVALS

- COTREP approved portfolio available
- APR Meets Preferred Guidance for PE and PP resins

Also sold as Cesa™ IR Black Additives



For any additional information on our color and additive masterbatch portfolio for packaging and consumer applications, please contact your local Avient representative.

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