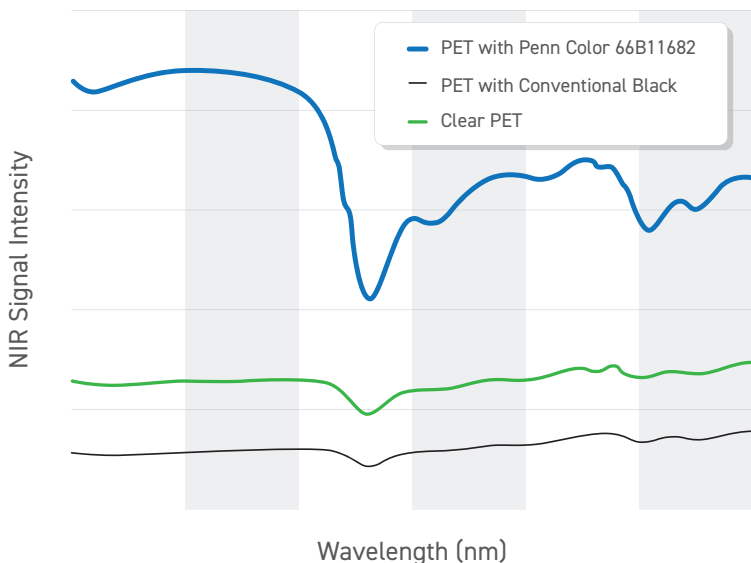


NIR SORTABLE BLACK



As articles travel through the recycling sortation process, they are scanned by a near-infrared laser. This allows for the identification of the base polymer and the sorting of the articles into their appropriate polymer bin, for recycling with their appropriate polymer family, leading to a recycled package. Traditional carbon black-based colorants block the laser from seeing and identifying the polymer, resulting in those articles being “kicked out” and not making it into the recycling stream. Many NIR sortable products today solve the sortability challenge but do not deliver on color, looking less jet, or lacking depth and intensity. Our proprietary NIR Black formulations deliver deep, rich, jet-black color in PET and Polyolefins while creating a sortable and recyclable package for various applications.

Every application and end article deserves the highest attention to detail. A consultation with our Penn Color team to discuss your package requirements will result in a detailed product recommendation and a win on the shelf.



66B11682 PET Black

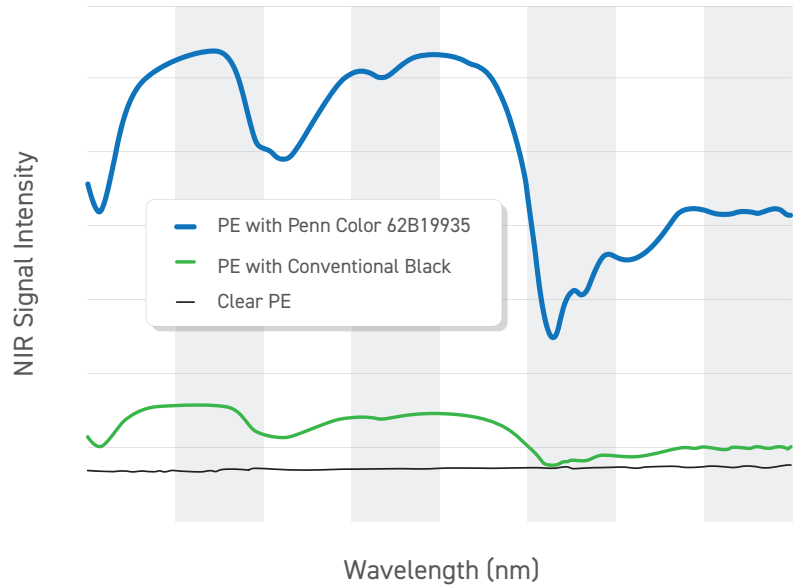
Sortable, high jetness PET based NIR Black delivered in a pellet form. This product provides sortability, recyclability, and a desirable rich black color aesthetic. Designed for use in PET bottles, sheet and injection molding. This product meets US FDA and EU compliance when used at recommended usage rates.

Product Code	LDR%	Jetness, Mc	Blackness, My	Undertone, dM	L*	a*	b*	Light, Transmission	Gloss 60°
66B11682	1.2%	124.1	120.7	3.3	29.9	-0.2	-2.0	0.3%	96
Conventional Black	1.3%	124.9	122.8	2.1	29.2	0.2	-1.4	0.2%	107



62B19935 PE Black

Sortable, high jetness polyethylene based NIR Black delivered in a pellet form. This product provides sortability, recyclability, and a desirable rich black color aesthetic. Designed for use in PE and PP across extrusion blow and injection molding applications. This product meets US FDA and EU compliance when used at recommended usage rates.



Product Code	LDR%	Jetness, Mc	Blackness, My	Undertone, dM	L*	a*	b*	Light, Transmission	Gloss 60°
62B19935	4.0%	136.3	133.7	2.6	25.6	-0.1	-1.4	0.1%	17.2
Conventional Black	0.5%	137.4	136.2	1.2	24.8	0.1	-0.6	0.1%	11.3

IMPORTANT INFORMATION

ISO 9001 Certified

LDR recommendation is intended for guidance only and may need to be adjusted based on performance, processing method and regulatory requirements. Detailed compliance documentation can be provided by Penn Color's Product Stewardship Department upon request. However, be advised it is the responsibility of the user to assess its product uses and applications and assure compliance to all applicable laws and regulations, including FDA 21 CFR and EU food contact status. Regional coding suffixes may apply.