

K44-15-122 Polyethylene Copolymer

K44-15-122 is a natural high density polyethylene copolymer designed specifically for extrusion of pressure pipe and tubing. When blended with an INEOS-approved black masterbatch, the resulting formulation (*called K44-15-123*) is listed in Plastics Pipe Institute (PPI) TR-4 as both a PE 3608 and PE80 material and is certified to NSF/ANSI Standard 14 and CSA Standard B137.1.

Typical Properties¹

Resin	Values		ASTM Method
	English Units	SI Units	
Density	—	0.944 g/cc	D4883
Melt Index 190°C/5.0 kg	—	0.52 g/10 min	D1238
Melt Index 190°C/ 21.6 kg	—	12 g/10 min	D1238
Compression Molded Sample			
Tensile Strength (2 in/min)			D638
@ Yield	3,000 psi	20.7 MPa	
@ Break	5,000 psi	34.5 MPa	
Elongation (2 in/min)			D638
@ Yield	11.2 %	11.2 %	
@ Break	>800%	>800%	
Flexural Modulus			D790A
2% Secant Method	109,000 psi	751 MPa	
Notched Izod Impact Strength	9 ft-lbf/in	45 kJ/m ²	D256
Hardness			D2240
Shore D	67	67	
Vicat Softening Point	250 F	121 C	D1525
Brittleness Temperature	<-180 F	<-118 C	D746
Environmental Stress Crack Resistance			D1693
Condition B, 100% Igepal, F50 (hrs.)	>1,000	>1,000	
Notched Tensile (PENT)	>100 hrs.	>100 hrs.	F1473
Oxidation Induction Time @ 210°C	>35 min	>35 min	D3895
Thermal Stability	428 F	220 C	D3350
Cell Classification, HDB-based (ASTM) ²	345464C	345464C	D3350
Cell Classification, MRS--based (ISO) ²	345465C	345465C	

¹ Typical properties will vary and are not to be used for specification purposes.

² When blended with INEOS-approved black masterbatch (compound name = 'K44-15-123').

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Olefins & Polymers USA



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Regulatory Information

The product and uses described herein may require global product registrations and notifications for chemical inventory listings, or for use in food contact or medical devices. For further information, call + 1-800-527-5419.

Health and Safety Information

The product described herein may require precautions in handling and use because of toxicity, flammability, or other consideration. The Material Safety Data Sheet (MSDS) contains the available product health and safety information for this material and can be found at www.ineos-op.com. Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.

The Material Safety Data Sheet for this product contains shipping descriptions and should be consulted, before transportation, as a reference in determining the proper shipping description. If the material shipped by INEOS is altered or modified, different shipping descriptions may apply and the MSDS of the original material should not be used.

For additional information, samples, pricing and availability, please contact:

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