

HDPE Raw Material and Pipe Quality Confirmation Guide List

	Test Specimen			Raw Material Suppliers Data			Pipe Production Data				Lab	PESTEC Data	
	Tested on Raw Material	Tested on injection moulded sheets or extruded pipes made from original raw material	Tested in final pipe product	General Development Measurements of Raw Material Suppliers before marketing the product. Data available on Data Sheets and re-tested from time to time	Test Data of raw material suppliers for each production lot but never confirmed on the certificate for the indicated lot delivery	Test Data of raw material suppliers for each production lot but not always confirmed on the certificate for the indicated lot delivery	Test Data of raw material suppliers for each production lot and always confirmed on the certificate for the indicated lot delivery	Production laboratory test before pipe production standard	Production test standard	Production laboratory test after pipe production standard	Production laboratory test after pipe production for extra charge	Possible independent laboratory test after pipe production for extra charge	PESTEC Quality Confirmations on Raw Material and Pipe Compliance
Raw Material Properties													
Melt Index	x			x			x	x				x	x
Density	x			x			x	x				x	x
Colour	x			x		x	x	x				x	x
Appearance	x			x		x	x	x					
Pigment Dispersion	x			x	x								
Melting Point	x			x		x						x	
Viscosity Number	x			x	x								
Vicat Softening Point	x			x		x							
Oxidation Induction Time	x			x	x							x	
Carbon Content	x			x		x						x	x
Stabilizer Content	x			x	x							x	
Flexural Modulus		x		x		x						x	x
IZOD Impact Strength		x		x		x						x	
Notched Impact Strength		x		x		x						x	
Hardness		x		x		x						x	
Tensile Creep Modulus	x			x	x								
Environmental Stress Crack Resistance (ESCR)		x	x	x		x						x	x
Hydrostatic Design Basis		x	x	x		x						x	x
Raw Material and Pipe Properties													
Tensile Strength at Yield		x	x	x		x				x		x	x
Tensile Strain at Yield		x	x	x		x				x		x	x
Tensile Strain at Break			x	x	x					x		x	x
UV Stability			x	x	x						x	x	x*2
Pipe Properties													
Pipe OD			x							x			x
Pipe Wallthickness			x							x			x
Pipe C-Ex Wallthickness *1			x							x			x
Pipe Ovalization			x							x			x
Pipe Circumference			x							x			x
Pipe External Spiral *1			x							x			x
Pipe Internal rib size *1			x							x			x
Pipe Length			x							x			x
General Quality			x							x			x
Surface Quality			x							x			x
Colour Compliance			x							x			x
Pipe Packing			x							x			x
Others													
Pipe Production Norm													x
Pipe Welding Norm													x
General Raw Material Norm Compliance													x
Safety Factor *3													x
UV Stability Warrantee													x*2

* 1 if applicable
 *2 acc TI 110-29 PESTEC Colour Recommendation
 * 3 related to the Hydrostatic Design Basis