



Plastic Pipe Testing Laboratory

NSIC – Technical Services Center at Rajkot, Gujarat offering the following testing
 Facilities to Industries through Plastic Testing Laboratory

A. Plastic Pipe Testing Laboratory

Sr No	Product Details	Test Details	Applicable IS	Approved By
1	PE Lateral Pipe	Dimensions	IS 12786:2009	Accreditation By NABL (ISO / IEC 17025 : 2017) And Approved By BIS
		Visual appearance		
		Hydraulic Characteristics (Quality & Acceptance test)		
		Reversion Test		
		Tensile Test		
		Environmental Stress Cracking		
		Carbon Black content		
		Carbon Black Dispersion		
2	Emitting Pipes	Carbon Black content	IS 13488:2008	Accreditation By NABL (ISO / IEC 17025 : 2017) And Approved By BIS
		Carbon Black Dispersion		
		Dimensions		
		Visual appearance		
		Uniformity of Emission Rate		
		Emission Rate of Emitting Unit as a function of inlet pressure		
		Flow path in emitting unit		
		Spacing of emitting unit		
		Resistance to Hydrostatic Pressure at ambient temp.		
		Resistance to Hydrostatic Pressure at Elevated temp		
		Resistance to tension at Elevated temp.		
		Resistance to pull out of joints		
		Environmental Stress Cracking		
		Emitting pipe Exponent		
3	UPVC Pipes for potable Water supplies up to 400 mm nominal diameter	Dimensions	IS 4985:2021	Accreditation By NABL (ISO / IEC 17025 : 2017) And Approved By BIS
		Visual appearance		
		Opacity		
		Reversion Test		
		Vicat Softening Temperature		
		Density		
		Sulphated Ash Content		
		Hydraulic Characteristics (acceptance & type tests)		
		Resistance to external blow at 0°C		
		VCM Content		
		K Value		
Effect on water				
4	PVC - U Screen and casing pipes for Bore / Tube well up to 250 mm	Colour	IS 12818:2010	Accreditation By NABL (ISO / IEC 17025 : 2017) And Approved By BIS
		Dimensions		
		Visual appearance		
		Internal Diameter		
		Specific Gravity		
		Impact Strength at 0°C		
		Tensile Strength		
		Vicat Softening Temperature		

5	HDPE Pipe potable water supplies upto 400 mm nominal diameter	Colour	IS 4984:2016	Accreditation By NABL (ISO / IEC 17025 : 2017) And Approved By BIS
		Dimensions		
		Visual Appearance		
		Hydraulic Characteristics (acceptance & type tests)		
		Reversion Test		
		Migration test		
		Density		
		Melt Flow Index		
		Carbon Black content		
Carbon Black Dispersion				
6	HDPE Pipe potable water supplies upto 400 mm nominal diameter	Oxidation Induction Time	IS 4984:2016	Accreditation by NABL & BIS is under process
		Overall Migration		
		Tensile Strength for Butt Fusion		
		Slow crack growth rate		
7	UPVC Pipe for Soil & Water Discharge	Dimensions	IS 13592:2013	Accreditation by NABL & BIS is under process
		Reversion Test		
		Stress Relief Test		
		Vicat Softening Temperature		
		Effect of Sunlight		
		Resistance to Sulphuric Acid		
		Resistance to external blow at 0 degree (impact test)		
		Tensile Strength		
		Axial Shrinkage		
		Water tightness of joints		
		Effect on water		
Resistance to Dichloromethane				
8	UPVC Pipe for Soil & Water Discharge - fittings	Dimension	IS 14735:1999	Accreditation by NABL & BIS is under process
		Stress Relief Test		
		Vicat Softening Temperature		
		Resistance to Sulphuric Acid		
		Sulphated Ash Content		
		Impact Strength at 0°C		
Hydraulic Pressure Test				
9	CPVC pipe for portable hot and cold water distribution supply	Dimensions	IS 15778:2007	Accreditation by NABL & BIS is under process
		Opacity		
		Effect on water		
		Reversion Test		
		Vicat Softening Temperature		
		Density		
		Verification of the Malfunction Temperature,		
		Hydrostatic Characteristics (Type & Acceptance)		
		Thermal Stability by Hydrostatic Pressure Testing		
		Resistance to external blow at 0 degree (impact test)		
		Flattening Test		
Tensile Strength				
10	Irrigation Equipment -Quick coupled Polyethylene Pipes pipes & fittings for Sprinkler Irrigation System	Dimension	IS 17425:2020	Accreditation by NABL & BIS is under process
		Carbon Black Content		
		Carbon Black Dispersion		
		Hydrostatic Characteristics (acceptance & type test)		
		Reversion Test		
		Tensile Test		
		Shore Hardness Test		
		Fusion Compatibility Test		
		Leakage Test		
		Hydraulic Proof Test		
		Weldability Test		
11	Injection molded PVC socket fittings with Solvent cement joints for water supplies	Dimension	IS 7834 (Part 1 to 8): 2018	Accreditation by NABL & BIS is under process
		Stress Relief Test		
		Effect on water		
		Opacity		
		Hydraulic Pressure Test		