



**NSIC – TECHNICAL SERVICES CENTRE
NATIONAL SMALL INDUSTRIES CORPORATION LIMITED**

(A Government of India Enterprise)

Aji Industrial Area, 80 Feet Road, Near Amul Chowk, Rajkot – 360003
Ph. 0281-2387398/396/729, Email: ntsraj@nsic.co.in, ntsraj.cfs@nsic.co.in

Plastic Testing Laboratory

NSIC – Technical Services Centre 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 Standard
1	PE Lateral Pipe	Dimensions	IS 12786
		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
		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
		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
		Dimensions	
		Visual appearance	
		Internal Diameter	
		Specific Gravity	
		Impact Strength at 0°C	
		Tensile Strength	
		Vicat Softening Temperature	
5	HDPE Pipe potable watersupplies	Colour	IS 4984
		Dimensions	
		Visual Appearance	
		Hydraulic Characteristics (acceptance & type tests)	
		Reversion Test	
		Migration test	
		Density	
		Melt Flow Index	
		Carbon Blank content	
		Carbon Blank Dispersion	
		Oxidation Induction Time	
		Overall Migration	
		Tensile Strength for Butt Fusion	
		Slow crack growth rate	
6	UPVC Pipe for Soil & Water Discharge	Dimensions	IS 13592
		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	
7	UPVC Pipe for Soil & Water Discharge - fittings	Dimension	IS 14735
		Stress Relief Test	
		Vicat Softening Temperature	
		Resistance to Sulphuric Acid	
		Sulphated Ash Content	
		Impact Strength at 0°C	
		Hydraulic Pressure Test	
8	CPVC pipe for portable hot and cold water distribution supply	Dimensions	IS 15778
		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	
9	Chlorinated Polyvinyl Chloride (CPVC) Fittings For Potable Hot And Cold Water Distribution Supplies	Dimensions	IS 17546
		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
		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)
		Stress Relief Test	
		Effect on water	
		Opacity	
		Hydraulic Pressure Test	

----- END -----