

Sample Submission Form Material Examination of CIPP

Initial Test **Retest**

Reference Test Report No. _____

Information on Specimen Sampling

Supervised by (Name)	Sampling		Confirmation of Sampling (Contractor Company/Site Manager)	
	Date	Time	Name in Block Letters	Signature

Sample Identification

DIBt Approval No.: Z-42.3-

Client (Material Tests)		Liner Material ID	
Building Owner		Length of CIPP	
Project		Pipeline Drive Name	
Contractor Company		Sample Name	
Manufacturer (Liner)		Installation Date	
Type of Resin	<input type="checkbox"/> UP <input type="checkbox"/> VE <input type="checkbox"/> EP <input type="checkbox"/> Other	Sampling Location	Drive Reception Manhole Interm. Manhole
Substrate	<input type="checkbox"/> Synthetic Fiber <input type="checkbox"/> Glass Fiber		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Pipe Geometry	<input type="checkbox"/> Circle DN	Sampling Position	Top Springline Bottom
	<input type="checkbox"/> Oval		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Coating is an Integral Part of the CIPP	<input type="checkbox"/> Yes <input type="checkbox"/> No	Remarks	
	<input type="checkbox"/> Outside <input type="checkbox"/> Inside		

Required Short-Term Properties (According to Client)

Flexural Modulus of Elasticity E_f [MPa]	Circ. Modulus of Elasticity E_U [MPa]
Bending Stress σ_{fb} [MPa]	Max. Creep Tendency $K_{N,24}$ [%]
Wall Thickness e_m [mm]	Glass Content [%]
Reduction Factor for Long-term Load A_1	Density ρ [g/cm ³]

Test Results (Please mark the tests to be conducted with an "X")*

Flexural Modulus of Elasticity, Bending Stress DIN EN ISO 178 / DIN EN ISO 11296-4							24h Creep Tendency DIN EN ISO 899-2 (in-line)		
<input type="checkbox"/>	Test Date	E_f [MPa]	σ_{fb} [MPa]	e_m [mm]	h_m [mm]	Test Direction	<input type="checkbox"/>	Test Date	$K_{N,24h}$ [%]
						<input type="checkbox"/> axial <input type="checkbox"/> radial			
Circumferential Modulus of Elasticity, Initial Ring Stiffness DIN EN 1228							24h Creep Tendency DIN EN 761 (in-line)		
<input type="checkbox"/>	Test Date	E_U [MPa]	S_0 [N/m ²]	e_m [mm]	h_m [mm]		<input type="checkbox"/>	Test Date	$K_{N,24h}$ [%]
Water Tightness <input type="checkbox"/> DIN EN 1610 (in-line) <input type="checkbox"/> DWA-A 143-3 (section 7.2.9)							Density DIN EN ISO 1183-1		
<input type="checkbox"/>	Test Date	Test Duration [min]	Test Pressure [bar]	Test Result		<input type="checkbox"/>	Test Date	Density ρ [g/cm ³]	
		30	0,5 ± 5%	<input type="checkbox"/> tight <input type="checkbox"/> leaking					
Annealing Residue by Calcination Method DIN EN ISO 1172							Spectral Analysis ASTM D5576 (FT-IR) (in line)		
<input type="checkbox"/>	Test Date	Resin Content [%]	Total Residue [%]	Glass Content [%]	Aggregate [%]	<input type="checkbox"/>	Test Date	Resin	
Thermal Analysis DIN EN ISO 11357-2 (DSC measurement) for Epoxy Resin									
<input type="checkbox"/>	Test Date	Glass Transition Temperature T_G [°C]				Enthalpy [J/g]			
		T_{G1}		T_{G2}		<input type="checkbox"/> exothermic	<input type="checkbox"/> endothermic		
Residual Styrene Content <input type="checkbox"/> DWA-A 143-3 (DIN 53394-2) <input type="checkbox"/> ISO 4901									
<input type="checkbox"/>	Test Date	Weight [mg]	Residual Styrene Content [mg/kg]	Residual Styrene Content [%]	Weight relative to				
					<input type="checkbox"/> total weight <input type="checkbox"/> pure resin				

Evaluation of the results to be carried out by the testing laboratory: yes no

Requirement	fulfilled	not fulfilled	Requirement	fulfilled	not fulfilled
Flexural Modulus of Elasticity E_f [MPa]	<input type="checkbox"/>	<input type="checkbox"/>	Circ. Modulus of Elasticity E_U [MPa]	<input type="checkbox"/>	<input type="checkbox"/>
Bending Stress σ_{fb} [MPa]	<input type="checkbox"/>	<input type="checkbox"/>	Max. Creep Tendency $K_{N,24}$ [%]	<input type="checkbox"/>	<input type="checkbox"/>
Wall thickness e_m [mm]	<input type="checkbox"/>	<input type="checkbox"/>	Glass Content [%]	<input type="checkbox"/>	<input type="checkbox"/>
Water Tightness	<input type="checkbox"/>	<input type="checkbox"/>	Density ρ [g/cm ³]	<input type="checkbox"/>	<input type="checkbox"/>
Remarks					

Test results by email to (please provide email address):

Signature Tester/Lab Head		sample ID	- keep free -

* For comparability of the test results, testing will follow the standards forming the basis of DIBt approval.