

Work Order No:	-	Work Order	MMCt 315/10 GM 6mt	LINE:	4	DATE:	15.11.2025
Raw Material	H1005	Component	T1	HEAD:	RK4A	Shift:	Daytime
Sample:	OD 315	PN 10	SOCKET RUBBER	SDR 26	S 12,5	Outturn Date:	15.11.2025

Test Name	Test Standard	Unit	Desired Features	Measured Value	Conclusion																																																															
VIEW	TS EN ISO 1452-2 5.1	-	When inspected visually, the pipes should have smooth inner and outer surfaces, free from any pits, cracks, or other surface defects.	Both the interior and exterior surfaces are smooth, clean, and even.	SUITABLE																																																															
Colour	TS EN ISO 1452-2 5.2	-	Drinking and utility water pipes should be gray, blue, or cream-colored. Pressurized wastewater pipes should be gray or brown. The color should be uniform across the entire pipe wall.	Grey	SUITABLE																																																															
Pipe Geometry	Outside Diameter	EN ISO 3126	mm	Min. 315,0 / Max. 316	315,4	SUITABLE																																																														
	Wall Thickness	EN ISO 3126	mm	Min. 12,10 / Max. 13,60	12,65-13,17	SUITABLE																																																														
	Ovality	EN ISO 3126	mm	Max. 3,8	0,8	SUITABLE																																																														
	Socket Inner Diameter	EN ISO 3126	mm	Min. 351,3 / Max. 352,9	351,8	SUITABLE																																																														
	Socket Ovality	EN ISO 3126	mm	Max. 2,9	0,4	SUITABLE																																																														
	Socket Length	EN ISO 3126	mm	Min. 88 / 72	96/98	SUITABLE																																																														
	Pipe Weight	EN ISO 3126	Kg	Min. 106,00 / Max. 108,72	107,9	SUITABLE																																																														
Pipe Length C/U	EN ISO 3126	mm	Cut: 6215±10 / Usefull: 6000 ±10	6215-6000	SUITABLE																																																															
Degree of Gelation (DCMT)	EN ISO 9852	-	There should be no interaction.	No Interaction	SUITABLE																																																															
Density	EN ISO 1183	kg/m <sup>3</sup>	1350 kg/m <sup>3</sup> ≤ ρ ≤ 1460 kg/m <sup>3</sup>	1,434	SUITABLE																																																															
Determination of resistance to external blows	EN ISO 3127	%	TIR ≤ 10	Number of samples: 2 Number of blows: 32 Damage:0  TIR ≤ 10	SUITABLE																																																															
Determination of the resistance to internal pressure	EN ISO 1167-1 EN ISO 1167-2	-	"20°C, 1 hour, 33,7 bar No damage should occur to the test specimens."	"It ended at 42 MPa pressure (33,7 Bar) in 15 hours and 43 minutes"	SUITABLE																																																															
Determination of tensile properties	EN ISO 6259- 1	Mpa	≥ 45	<table border="1"> <thead> <tr> <th>Num</th> <th>Area mm<sup>2</sup></th> <th>Force N</th> <th>Stress MPa</th> <th>Len At mm</th> <th>Final Len mm</th> <th>At Final %</th> </tr> </thead> <tbody> <tr><td>1</td><td>46,913</td><td>2140,92</td><td>45,63</td><td>38,116</td><td>38,23</td><td>100,0</td></tr> <tr><td>2</td><td>55,224</td><td>2690,16</td><td>48,70</td><td>1,210</td><td>36,12</td><td>144,9</td></tr> <tr><td>3</td><td>50,138</td><td>2430,00</td><td>48,45</td><td>40,237</td><td>40,43</td><td>161,7</td></tr> <tr><td>4</td><td>55,952</td><td>2661,92</td><td>47,56</td><td>0,991</td><td>35,29</td><td>141,2</td></tr> <tr><td>5</td><td>51,109</td><td>2461,92</td><td>48,16</td><td>36,026</td><td>37,00</td><td>146,3</td></tr> <tr><td>6</td><td>55,427</td><td>2638,72</td><td>47,60</td><td>1,003</td><td>36,71</td><td>146,9</td></tr> <tr><td>7</td><td>49,483</td><td>2476,60</td><td>50,05</td><td>41,855</td><td>42,42</td><td>169,7</td></tr> <tr><td>8</td><td>52,721</td><td>2501,08</td><td>47,43</td><td>1,176</td><td>40,46</td><td>160,3</td></tr> </tbody> </table>	Num	Area mm <sup>2</sup>	Force N	Stress MPa	Len At mm	Final Len mm	At Final %	1	46,913	2140,92	45,63	38,116	38,23	100,0	2	55,224	2690,16	48,70	1,210	36,12	144,9	3	50,138	2430,00	48,45	40,237	40,43	161,7	4	55,952	2661,92	47,56	0,991	35,29	141,2	5	51,109	2461,92	48,16	36,026	37,00	146,3	6	55,427	2638,72	47,60	1,003	36,71	146,9	7	49,483	2476,60	50,05	41,855	42,42	169,7	8	52,721	2501,08	47,43	1,176	40,46	160,3	SUITABLE
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Elongation at break	EN ISO 6259- 1	%	≥ 80	<table border="1"> <tbody> <tr><td>153,0</td></tr> <tr><td>144,5</td></tr> <tr><td>161,7</td></tr> <tr><td>141,2</td></tr> <tr><td>148,3</td></tr> <tr><td>146,8</td></tr> <tr><td>169,7</td></tr> <tr><td>160,3</td></tr> </tbody> </table>	153,0	144,5	161,7	141,2	148,3	146,8	169,7	160,3	SUITABLE																																																							
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Vicat Softening Temperature	EN ISO 2507-1	°C	≥ 80	83,97 °C	SUITABLE																																																															
Dimensional Stability	EN ISO 2505	%	"≤ 5% The original appearance of the pipe must not be altered."	4,30%	SUITABLE																																																															
Impact analyses on drinking and utility water - Elemental Analysis (Ba,Co,Cu,Fe,Li,Mn,Zn,Al,Ni)	EN ISO 8795	mg/kg	Aluminum, mg/kg < 1 Barium, mg/kg, < 1 Cobalt, mg/kg, < 0,05 Copper, mg/kg < 5 Iron, mg/kg < 48 Lithium, mg/kg, < 0,6 Manganese, mg/kg, < 0,6 Nickel, mg/kg < 0,02 Zinc, mg/kg < 5	Aluminum, mg/kg, 0,0 Barium, mg/kg, 0,0 Cobalt, mg/kg, 0,0 Copper, mg/kg 0,0 Iron, mg/kg 0,0 Lithium, mg/kg, 0,0 Manganese, mg/kg, 0,0 Nickel, mg/kg 0,0 Zinc, mg/kg 0,0	SUITABLE																																																															
PVC-U technical specifications	Withstands Pressure	EN ISO 1167-1 EN ISO 1167-2	atm	At least 10 bar (atm)																																																																
	Working Fluid Temperature	EN ISO 1452	°C	Up to +60 °C																																																																
	Freeze Resistance	EN ISO 1452	°C	Down to -15 °C																																																																
	Modulus of Elasticity	EN ISO 1452-1	mpa	3060 Mpa																																																																
	Poisson Ratio	EN ISO 6259- 2		0,35																																																																
	Thermal Conductivity	EN ISO 8302 - 8301	W/m. °C	0,147 W/m. °C																																																																
	Specific Heat Capacity	EN ISO 10456	J/g	0,84 - 2,1 J/g																																																																
	Impact Resistance	EN ISO 3127		(23 °C, Izod) 0,08 Kj / m <sup>2</sup>																																																																
Maximum Tensile Strength	EN ISO 6259- 1	mpa	(23 °C) 53 Mpa																																																																	

Test Operator:	BÜŞRA ÇAPAR Quality lab Engineer
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