

# คุณสมบัติทางกายภาพและทางกล ของท่อและอุปกรณ์ข้อต่อพีวีซี "ท่อน้ำไทย"

PHYSICAL AND MECHANICAL PROPERTIES OF "THAI PIPE" uPVC PIPE & FITTINGS

## คุณสมบัติทั่วไปของท่อและอุปกรณ์ข้อต่อท่อพีวีซี "ท่อน้ำไทย"

GENERAL PROPERTIES OF "THAI PIPE" uPVC PIPE & FITTING

ITEM PROPERTIES	UNIT	TEST METHOD	CHARACTERISTIC VALUE
Specific Gravity	-	A.S.T.M. D792	1.43
Hardness	Rockwell R	A.S.T.M. D785	120
Water Absorption	mg/cm <sup>2</sup>	A.S.T.M. D570	0.04 ~ 0.06
Tensile Strength	Kgf/cm <sup>2</sup>	A.S.T.M. D638-60T	500 ~ 550
Elongation at Breaking	%	A.S.T.M. D638	100 ~ 170
Bending Strength	Kgf/cm <sup>2</sup>	A.S.T.M. D790-59T	800 ~ 1,000
Compressive Strength	Kgf/cm <sup>2</sup>	A.S.T.M. D695	700
Modulus of Elasticity	Kgf/cm <sup>2</sup>	A.S.T.M. D747	2.8 ~ 3.0 x 10 <sup>4</sup>
Poisson's Ratio	-	-	0.35 ~ 0.40
Impact Strength (charpy)	Kgf-cm/cm <sup>2</sup>	A.S.T.M. D256-56	5.0
Coefficient of Linear Expansion	<sup>0</sup> C <sup>-1</sup>	A.S.T.M. D696	6 ~ 7 x 10 <sup>5</sup>
Specific Heat	Cal/g. <sup>0</sup> C	-	0.20 ~ 0.28
Thermal Conductivity	Kcal/m.h. <sup>0</sup> C	-	0.12 ~ 0.14
Softening Temperature	<sup>0</sup> C	A.S.T.M. D648-56	75 ~ 82
Flame Resistance	-	A.S.T.M. D635-56T	Self-extinguishing
Volume Resistivity	Ω.cm	A.S.T.M. D257-54T	3 ~ 5 x 10 <sup>15</sup>
Dielectric Strength	KV/mm	-	More than 40
Dielectric Power Factor	-	A.S.T.M. D150-54T	0.02
Dielectric Constant	-	A.S.T.M. D150-54T	3.2