

**C-HPU KTW** thermoplastic polyurethane with resistance to hydrolysis  
**Mechanical, Physical and Thermal Properties**

properties	condition	standard	unit		unit	
colour				nature		nature
hardness	23°C	ISO 868	Shore A	96 ± 2	Shore A	96 ± 2
hardness	23°C	ISO 868	Shore D	48 ± 3	Shore D	48 ± 3
modulus 100%	23°C	DIN 53 504	MPa	≥ 12	psi	≥ 1740
modulus 300 %	23°C	DIN 53 504	MPa	≥ 22	psi	≥ 3190
tensile strength	23°C	DIN 53 504	MPa	≥ 45	psi	≥ 6525
elongation at break	23°C	DIN 53 504	%	≥ 450	%	≥ 450
tear strength	23°C	DIN ISO 34-1	kN/m	≥ 80	lbf/inch	≥ 450
spec. gravity	23°C	ISO 1183	kg/m <sup>3</sup>	1120	g/cm <sup>3</sup>	1,12
abrasion	23°C	DIN 53 516	mm <sup>3</sup>	20	mm <sup>3</sup>	20
compression set	*	ISO 815	%	≤ 30	%	≤ 30
compression set	**	ISO 815	%	≤ 35	%	≤ 35
minimum service temperature			°C	-37	°F	-35
maximum service temperature			°C	110	°F	230

\* 24h 70°C 25% def.

\*\* 24h 100°C 25% def.

**Chemical Properties**

Copolymer, based on aromatic isocyanate and diols

Resistant to oil, water, ozone, microbes

Not resistant to conc. acids, conc. lyes, conc. alcohols and aromatic solvents

Foodstuff approval: in Accordance with FDA CFR 21-177.2600

KTW, W270

1935/2004 EC