

## material specification

### s-mart HTPU

(high temperature polyurethane) for high temperature application

property	condition	unit	value	standard
color			○ natural	
hardness	23° C	Shore A	96 ± 2	ISO 868
hardness	23° C	Shore D	50 ± 3	ISO 868
modulus 100 %	23° C	MPa	11	DIN 53504
modulus 300 %	23° C	MPa	22	DIN 53504
tensile strength	23° C	MPa	45	DIN 53504
elongation at break	23° C	%	500	DIN 53504
tear strength	23° C	kN/m	80	DIN ISO 34-1 methode B
spec. gravity	23° C	g/cm <sup>3</sup>	1,17	ISO 1183
abrasion	23° C	mm <sup>3</sup>	15	DIN 53516
compression set	*	%	32	ISO 815
compression set	**	%	35	ISO 815
compression set	***	%	50	ISO 815
minimum service temperature		°C	-35	
maximum service temperature		°C	135	
maximum service temperature (short)		°C	150	

\* 24h 70° C 25% deflection \*\* 24h 100° C 25% deflection \*\*\* 24h 125° C 25% deflection

the mentioned data are only valid for test pieces of the corresponding ISO, DIN and ASTM standards and cannot be directly related to gaskets and joints. the values which are marked with the symbols greater than ( $\geq$ ) and smaller than ( $\leq$ ) are nominal values and must be fulfilled of each batch. all values which are not marked are typical values which are only tested on selected samples.

copolymer, based on aromatic isocyanate and diols

resistant to: oil, hot water, ozone

not resistant to: conc. acids, conc. lyes, conc. alcohols and aromatic solvents

turnability: bad

tool-abrasion: low