

MECHANICAL PROPERTIES

Property	Units	SE510 Specification Limits	SE510 Typical Value	SE515 Specification Limits	SE515 Typical Value	SE524 Specification Limits	SE524 Typical Value	SE533 Specification Limits	SE533 Typical Value	Test Method
*Density	kg.m ⁻³	200 ±40	195	250 ±40	256	400 ±40	400	530 ±40	550	BSENISO 845
**Hardness	Shore OO #Shore A	-	35 ±5 <5	-	45 ±5 5 ±2	-	65 ±5 17 ±3	-	80 ±5 30 ±10	ASTM D2240
***Compression Stress 40% strain	kPa	50 ±40	50	90 ±40	90	160 ±40	160	580 ±150	584	BSENISO 3386 part 1,2
Tensile Strength	N.mm ⁻²	0.5 min.	0.9	0.75 min.	1.2	1.0 min.	1.6	1.5 min.	3.2	BSENISO 1798
Elongation to failure	%	75 min.	120	100 min.	200	75 min.	150	100 min.	190	BSENISO 1798
Compression Set 50% compression 22 hours @ 70°C 24 hours recovery	%	20 max.	16	15 max.	10	15 max.	10	15 max.	10	BSENISO 1856

*Density measured on 25 mm diameter cord sample. The density of samples of different sizes will be different from that stated here.

**Hardness measured on 10 mm thick samples. At less than 10mm the measured hardness will increase with density.

***Compression Stress measured on samples as defined in BSENISO 3386. The compressive stress on samples of different dimensions, especially thickness may vary from that quoted here.

#It is not possible to perform a Shore A hardness test on sponge material. These values are provided as a guideline for comparison to solid materials and as such are not designed for use in specifications.

For further information about physical properties for other sample sizes, please contact the technical department.