



### LSR Characteristics

The products vulcanized with the Liquid Silicone Rubber have the following characteristics:

- Excellent high temperature resistance +250° C
- Excellent low temperature resistance and flexibility - 60°C
- Very good thermal stability
- Excellent resistance to ageing and great stability to ozone and UV rays
- Very good dielectric behaviour in a wide temperature range
- Very good stretch characteristics inside the provided hardness range
- Very good ultimate tensile stress
- Very good stretch against breaking
- Physiological independence
- Inertless (no taste or smell)
- Very good size stability
- The products satisfy the BGA, FDA, KTW rules regarding the contact with food

### ■ SPECIALIZED ITEMS:

Applications for oil resistance  
 Electrical conductivity  
 Fuel resistance  
 Medical contact  
 Fluorurate silicone

### Colours

Generally the Liquid Silicone Rubber are transparent; they can be coloured adding a third component, a coloring paste, into the mixer.

Now it's possible to produce details in the following colours: RED, WHITE, BLACK, GREY, GREEN, SKY-BLUE, YELLOW; other colours can be custom made for special items.

### Hardness

Hardness = range 20 - 80 Shore A

Characteristics	LSR 60	LSR 70
Density (g/cm <sup>3</sup> ± 0,02)	1,12	1,14
Viscosity in mPA · s, speed gradient (γ = 10 s <sup>-1</sup> )	700.000	1.000.000
Mixing ratio A : B	1 : 1	1 : 1
Pot-life in days at room temperature (inside a closed container)	3	3
Mechanical properties (measured over small plates, 10 min/175°C +4 h/200°C/hot air)	unstabilized stabilized	
Hardness ±4 (Shore A) (DIN 53505)	58/60	68/70
Tensile stress (MPa) (DIN 53504)	9,0/9,0	8,5/8,5
Elongation to breakage (%) (DIN 53504)	500/400	400/300
Tear strength (N/mm) (ASTM-D 624 test B)	30/30	30/20
Elastic efficiency (%) (DIN 53512)	60/60	60/60
Permanent deformation for compression (22 h/175°C) (%) (DIN 53517)	55/25	50/25
<b>Electric characteristics</b>	<b>LSR 60</b>	<b>LSR 70</b>
Resistivity (Ω · cm) (DIN 53481)	3 · 10 <sup>-15</sup>	3 · 10 <sup>15</sup>
Dielectric strength (kV/mm) (DIN 53481)	27	27
Dielectric constant ε <sub>r</sub> (50 Hz) (DIN 53483)	3,3	3,5
Dielectric dissipation factor (tan δ / 50 Hz) (DIN 53483)	0,0035	0,0035