

HIGH CONSISTENCY RUBBER | ELASTOSIL® R *PLUS* 4001

# EXTREMELY VERSATILE PLATINUM-CURING HCR FOR MOLDING APPLICATIONS

High consistency silicone rubber grades of the ELASTOSIL® R *plus* 4001 series are addition-curing ready-to-use compounds for the manufacture of molded articles. This series combines the benefits of two worlds: the excellent mechanical properties of high consistency rubber and the fast-curing properties as exhibited by liquid silicone rubber. A broad range of available hardness grades from Shore A 20 to Shore A 90 makes ELASTOSIL® R *plus* 4001 the material of choice for all kinds of applications – from very soft to extremely hard.

ELASTOSIL® R *plus* 4001 may be fine-tuned by blending different hardness grades or by adding all kinds of additives that are used for the compounding of ELASTOSIL® high consistency rubber to create your individual rubber solutions. The vulcanization of ELASTOSIL® R *plus* 4001 generates no such by-products as encountered with peroxide-curing systems. Elastomers made of ELASTOSIL® R *plus* 4001 are therefore odorless and predestined for sensitive applications once postcured properly.

The whole series can be processed by compression and transfer molding. Even injection molding is possible for the Shore A 30 – 80 grades. For the Shore A 20 and Shore A 90 grades, special adjustments in terms of equipment and mold design may be required.

**Special Characteristics:**

- Broad range of available hardness: From Shore A 20 to 90
- Customized hardness can be achieved by blending individual grades
- Ready-to-use system for molding applications
- Excellent mechanical properties
- Fast curing: up to 50% faster than comparable peroxide curing systems
- Odorless
- Compatible with most ELASTOSIL® AUX additives and color pastes (for more information, see brochure "Solid and Liquid Silicone Rubber – Material and Processing Guidelines")
- Suitable for sensitive applications (compliant with the positive lists of BfR Recommendation "XV. Silicones" and FDA 21 CFR §177.2600 "Rubber articles intended for repeated use")



Product Information				
Grade	Hardness [ShA] DIN 5350	Tensile Strength [N/mm <sup>2</sup> ] DIN 53 504-S1	Elongation at Break [%] DIN 53 504-S1	Tear Resistance [N/mm] ASTM D 624 B
ELASTOSIL® R plus 4001/20	20	9.0	1,200	34
ELASTOSIL® R plus 4001/30	30	10.0	1,030	45
ELASTOSIL® R plus 4001/40	40	11.5	840	38
ELASTOSIL® R plus 4001/50	50	11.5	750	35
ELASTOSIL® R plus 4001/60	60	11.0	600	30
ELASTOSIL® R plus 4001/70	70	10.3	600	34
ELASTOSIL® R plus 4001/80	80	8.5	580	29
ELASTOSIL® R plus 4001/90	90	5.0	140	18



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