

# WACKER HIGH-CONSISTENCY SILICONE RUBBER

## Product Selection Guide

H.M. Royal offers a variety of ELASTOSIL® and SILPURAN® high-consistency silicone rubber (HCR) products for a wide range of applications, including automotive, aerospace, wire and cable, molded rubber goods, and more.



Use this guide to compare the features and benefits and find the best solution for your specific needs.



Peroxide-Cure Systems										
Product	Main Characteristics	Hardness Shore A ISO 7619-1	Specific Gravity (g/cm³) ISO 1183-1A	Tensile Strength (N/mm²) ISO 37 Typ 1	Elongation at Break (%) ISO 37 Typ 1	Tear Strength (N/mm) ASTM D624B	Compression Set (%) [22 h/175 °C] DIN ISO 815-B	Compliance	Platinum Cure System	Typical Applications
ELASTOSIL® R 401	General – multipurpose	10-90	1.15	11	450	23	31	FDA*	—	Various industrial parts, profiles, tubing, food processing
ELASTOSIL® R 407	Multipurpose NSF 51	40-80	1.15	11	425	22	35		—	Various NSF 51 food contact applications, bakeware
ELASTOSIL® R 420	High tear resistance, compression	30-70	1.15	10	600	39	32		—	Various applications for high tear strength; beneficial in processing with undercuts that require bending and stretching to demold the part
ELASTOSIL® R 427	High tear resistance, extrusion	30-70	1.15	10	600	39	32		—	Various applications for high tear strength; beneficial in processing with undercuts that require bending and stretching to demold the part; made in the U.S.
ELASTOSIL® R 701	Media resistance, low compression set	40-80	1.24	7.8	340	16	7	—	—	Industrial molded parts: composite, face masks, gaskets, seals, rollers
ELASTOSIL® R 770	Flame retardant	50-60	1.5	4.5	425	14	38	—	—	Transportation applications

Platinum-Cure Systems										
ELASTOSIL® R plus 4000	High-transparency multipurpose molding	40-70	1.14	9.3	725	46	35	FDA* USP VI	Aux Batch PT2	Various molded industrial, food and medical parts
ELASTOSIL® R plus 4105	High-transparency extrusion compound	40-80	1.14	11	750	28	13		Aux Batch PT1	Medical tubing, food applications
ELASTOSIL® R plus 4305	High tear extrusion (base + catalyst)	30-90	1.17	10	630	41	17			Extruded tubes and profiles
SILPURAN® 8020	Very good mechanical properties	40-70	1.14	11	650	33	27	FDA* USP VI ISO 10993	Crosslinker M	Medical/pharmaceutical injection-molding applications; highly transparent, durable parts; compression molding, transfer molding or injection molding
SILPURAN® 8030	High tear resistance	40-70	1.14	10	700	40	22		Crosslinker X	Medical/pharmaceutical extrusion applications; highly transparent, durable tubes and catheters

Technical data shows typical values for silicones. Please review the specific TDS for more accurate data as the properties vary by durometer.  
\*FDA CFR 21 177.2600 “rubber articles intended for repeat use”