

## Tufel™ II 94506

### Description

Tufel II Silicone Rubber Compounds 94406, 94506, 94606, 94706 are 40-70 durometer low volatile fast-cure addition cured silicone elastomers for extrusion and calendering. They may be used by themselves or blended to intermediate durometers. Applications include extruded tubings, profiles and calendered sheets.

### Key Features and Typical Benefits

- LV Bases Minimize Porosity and Post Cure
- Totally Peroxide-Free Cure System
- Broad Processing Window
- High Output Rates
- High Tear Strength
- Tight Surface Cure
- Non-blooming
- Translucency

### Typical Physical Properties

TYPICAL CHARACTERISTICS OF UNCURED TUFEL II SILICONE RUBBER - 94006 SERIES

<b>PROPERTIES</b>	<b>94406</b>	<b>94506</b>	<b>94606</b>	<b>94706</b>
Specific Gravity	1.11	1.15	1.19	1.22
Appearance	Translucent	Translucent	Translucent	Translucent

Polymer Classification (ASTM D-1418)	VMQ	VMQ	VMQ	VMQ
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TYPICAL RHEOLOGICAL PROFILE - MONSANTO ODR WITH 3° ARC @ 150°C  
(300°F)

Minimum Viscosity	1-6	3-7	3-8	3-9
T1, Minutes	0.1-0.4	0.1-0.4	0.1-0.3	0.1-0.4
7 Min. Torque (lb./in.)	33-48	34-53	45-60	45-60

TYPICAL PHYSICAL PROPERTIES OF TUFEL II SILICONE RUBBER - 94006  
SERIES

ASTM METHOD	PRESS CURE - 10 MINUTES @ 177°C (350°F)	94406	94506	94606	94706
D-2240	Hardness, Durometer A	39	48	56	71
D-412	Tensile Strength, psi	1300	1348	1230	1320
	MPa	9.0	9.2	8.5	9.1
D-412	Elongation, %	900	900	740	630
D-624	Tear Resistance, Die B, ppi	225	250	240	320
	KN/M	39	44	42	56
D-412	Tensile Modulus @ 100% psi	140	190	245	500
	MPa	1.0	1.3	1.7	3.4
	POST CURE 2 HOURS @ 177°C (350°F)				
D-2240	Hardness, Durometer A	43	53	61	73
D-412	Tensile Strength, psi	1350	1400	1250	1350
	MPa	9.3	9.7	8.6	9.3
D-412	Elongation, %	800	850	680	600
D-624	Tear Resistance, Die B, ppi	235	270	270	330
	KN/M	41	47	47	58
D-412	Tensile Modulus @ 100% psi	170	225	300	530
	MPa	1.2	1.6	2.1	3.7
D-395	Compression Set, % 22 hrs. @ 150°C (300°F)	20	20	20	20

## Regulatory Compliance

- A representative sample of an analogous product to Tufel II 94506 met the requirements of USP Class VI and ISO 10993 under Good Laboratory Practices (GLP).
- Listed as UL 94 HB (File No. E205753)
- The ingredients are listed in the BfR recommendation XV “Silicones” <sup>(1)</sup>
- Compositionally compliant with 21 CFR 177.2600 – Rubber articles intended for repeated use<sup>(2)</sup>

(1) Producer of the final article needs to test and confirm that the final product meets the extraction limits of BfR XV or corresponding EU legislation.

(2) It is the responsibility of the user to determine that the final product complies with the extractive limitations and other requirements of 21 CFR 177.2600, under their specific manufacturing procedures

### **Patent Status**

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

### **Product Safety, Handling and Storage**

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at [www.momentive.com](http://www.momentive.com) or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

### **Limitations**

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

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