

## 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
-----------------------------------------	-----	-----	-----	-----

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.

### **Contact Information**

Email

[commercial.services@momentive.com](mailto:commercial.services@momentive.com)

### **Telephone**

<b>Americas</b>	<b>Latin America</b>	<b>EMEAI- Europe, Middle East, Africa &amp; India</b>	<b>ASIA PACIFIC</b>
+1 800 295 2392 Toll free*	<b>Brazil</b> +55 11 4534 9650 Direct Number	<b>Europe</b> +390510924300 Direct number	<b>China</b> 800 820 0202 Toll free +86 21 3860 4892 Direct number
+704 805 6946 Direct Number	<b>Mexico</b> +52 55 2169 7670 Direct Number	<b>India, Middle East &amp; Africa</b> + 91 44 71212207 Direct number*	<b>Japan</b> +81 3 5544 3111 Direct number
*All American countries		<b>*All Middle Eastern countries, Africa, India,</b>	<b>Korea</b> +82 2 6201 4600

For literature and technical assistance, visit our website at: [www.momentive.com](http://www.momentive.com)

**DISCLAIMER:**

**THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY “SUPPLIER”), ARE SOLD SUBJECT TO SUPPLIER’S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER’S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN.** Each user bears full responsibility for making its own determination as to the suitability of Supplier’s materials, services, recommendations, or advice for its own particular use. Each user must identify and

perform all tests and analyses necessary to assure that its finished parts incorporating Supplier's products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier's standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

\*Tufel™ ist ein Markenname der Momentive Performance Materials Inc.

The use of the "™" symbol designates registered or unregistered trademarks of Momentive Performance Materials Inc. or its affiliated companies. Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.