

Tufel* III 92506

Description

Tufel III rubber series are biocompatible(1), two component silicone rubber compounds. 92506 and 92656 are 50 and 65 durometer addition curable silicone elastomers that offer low compression set and high resilience with no post bake required for most applications. The combination of these properties may lead to longer service life in highly mechanical applications. The 92506 and 92656 elastomers can be used to produce extruded and calendered parts with excellent permanent set resistance and should be considered for applications such as peristaltic pump tubing, gaskets and seals.

Key Features and Benefits

- Low compression set
- Excellent elastic memory
- Biocompatible(1)
- No post baking required for most applications
- Low volatile bases minimize porosity
- Peroxide-free cure system
- Broad processing window
- High output rates
- Tight surface cure
- Non-blooming
- Translucency
- Low hysteresis

Typical Physical Properties

Typical Characteristics of Uncured Tufel III Silicone Rubber – 92006 Series

Properties	92506	92656
Specific Gravity	1.12	1.16
Appearance	Translucent	Translucent
Polymer Classification (ASTM D-1418)	VMQ	VMQ
Williams Plasticity Range (ASTM D-926)	200-300	210-310

Typical Physical Properties of Tufel III Silicone Rubber – 92006 Series Catalyzed with 1.0 pphr of CA-6 per 99 pphr of base compound

ASTM Method	Press Cure - 10 minutes @ 177°C (350°F)	92506	92656
D-2240	Hardness, Durometer A	50	65
D-412	Tensile Strength, psi	1100	1300
	MPa	7.6	8.9
D-412	Elongation, %	450	350
D-624	Tear Resistance, Die B, ppi	100	120
	KN/m	17.5	21.0
D-412	100% Modulus, psi	200	375
	MPa	1.4	2.6
D-395	Compression Set, % 22 hrs. @ 177°C (350°F)	30	31
D-2632	Bayshore Resilience	60	61
ASTM Method	Post Cure - 2 hrs @ 177°C (350°F)	92506	92656
D-395	Compression Set, % 22 hrs. @ 177°C (350°F)	15	14

Potential Applications

Healthcare

- Fluid and drug delivery tubing
- Volumetric infusion pumps
- Enteral pumps
- Ambulatory pumps
- Hose/tubing used in pharmaceutical production
- Gaskets, seals and valves

Consumer Goods

- Tubing used for dispensing of food and beverages
- Gaskets, seals and valves

General Industrial

- Tubing used in chemical/industrial processing plants
- Tubing used in laboratory peristaltic pumps
- Gaskets, seals and valves

Regulatory Compliance

- A representative sample of an analogous product to Tufel II 92506 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” ⁽¹⁾
- Compositionally compliant with 21 CFR 177.2600 – Rubber articles intended for repeated use⁽²⁾

(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

Standard copy to come

Product Safety, Handling and Storage

Standard copy to come

Limitations

Standard copy to come

Contact Information

For product prices, availability, or order placement, contact our customer service at Momentive.com/CustomerService/

For literature and technical assistance, visit our website at: 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 is a trademark of Momentive Performance Materials Inc.

Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.