# MOMENTIVE" 

## Tufel ${ }^{\text {TM }}$ II 94405

## Description

Tufel II Silicone Rubber Compounds 94405, 94505, 94605, and 94705 are 40-70 durometer low volatile fast-cure addition cured silicone elastomers for molding. They may be used by themselves or blended to intermediate durometers. Applications include fabricated molding that require short cycle time, deep section cures, and parts with low extractable requirements.

## Key Features and Typical Benefits

- LV Bases Minimize Post Cure Times
- Totally Peroxide-Free Cure System
- Significant Reduction in Molding cycle Times
- Lower Molding Temperature Range ( $\left.150-166^{\circ} \mathrm{C}\right)\left(300-330^{\circ} \mathrm{F}\right)$
- Superior Mixed Shelf Life
- High Tear Strength
- Tight Surface Cure
- Non-blooming
- Translucency

Typical Physical Properties
TYPICAL CHARACTERISTICS OF UNCURED TUFEL II SILICONE RUBBER - 94005 SERIES

| PROPERTIES | 94405 | 94505 | 94605 | 94705 |
| :--- | :--- | :--- | :--- | :--- |
| Specific Gravity | 1.11 | 1.15 | 1.19 | 1.23 |


| Appearance | Translucent | Translucent | Translucent | Translucent |
| :--- | :--- | :--- | :--- | :--- |
| Polymer Classification <br> (ASTM D-1418) | VMQ | VMQ | VMQ | VMQ |

TYPICAL RHEOLOGICAL PROFILE - MONSANTO ODR WITH $3^{\circ}$ ARC @ $150^{\circ} \mathrm{C}$ (300F)

| Minimum Viscosity | $\mathbf{1 - 6}$ | $\mathbf{2 - 5}$ | $\mathbf{2 - 7}$ | $\mathbf{2 - 7}$ |
| :--- | :--- | :--- | :--- | :--- |
| T1, Minutes | $0.5-1.0$ | $0.5-1.0$ | $0.5-1.0$ | $0.5-1.0$ |
| T1, Minutes | $33-48$ | $32-52$ | $32-52$ | $60-90$ |

TYPICAL PHYSICAL PROPERTIES OF TUFEL II SILICONE RUBBER - 94005 SERIES

| ASTM METHOD | PRESS CURE - 10 MINUTES @ $177^{\circ} \mathrm{C}$ (350우) | 94405 | 94505 | 94605 | 94705 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| D-2240 | Hardness, Durometer A | 40 | 47 | 57 | 72 |
| D-412 | Tensile Strength, psi | 1320 | 1325 | 1250 | 1340 |
|  | MPa | 9.1 | 9.1 | 8.6 | 9.2 |
| D-412 | Elongation, \% | 890 | 930 | 750 | 600 |
| D-624 | Tear Resistance, Die B, ppi | 230 | 250 | 240 | 325 |
|  | KN/M | 40.4 | 43.9 | 42.1 | 57.0 |
| D-412 | Tensile Modulus @ 100\% psi | 140 | 175 | 250 | 500 |
|  | MPa | 1.0 | 1.2 | 1.7 | 3.4 |
|  | POST CURE 2 HOURS @ 177º O (350ํ.F) |  |  |  |  |
| D-2240 | Hardness, Durometer A | 43 | 52 | 62 | 74 |
| D-412 | Tensile Strength, psi | 1390 | 1400 | 1250 | 1340 |
|  | MPa | 9.6 | 9.7 | 8.6 | 9.2 |
| D-412 | Elongation, \% | 780 | 880 | 690 | 580 |
| D-624 | Tear Resistance, Die B, ppi | 230 | 270 | 260 | 325 |
|  | KN/M | 40.4 | 47.4 | 45.6 | 57.0 |
| D-624 | Tensile Modulus @ 100\% psi | 175 | 225 | 320 | 530 |
|  | MPa | 1.2 | 1.6 | 2.2 | 3.7 |
| D-395 | Compression Set, \% 22 hrs. @ $150^{\circ} \mathrm{C}$ (300ํ ) | 20 | 20 | 23 | 18 |

## Regulatory Compliance

- A representative sample of an analogous product to Tufel ll 94405 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

여기에 포함된 어떠한 내용도 관련 특허가 없음을 의미하거나 특허 소유자의 허가 없이 특허에서 다루는 발명을 실행하기 위한 허가, 유도 또는 권고를 구성하는 것으로 해석되 어서는 안됩니다.

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## Limitations

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