

FQE 206U

Fluorosilicone base compound

Description:

FQE 206U fluorosilicone is a base compound to be considered for applications exposed to non-polar fluids and solvents including fuels, oils and greases. This material typically exhibits the combination of excellent compression set with high tensile strength and elongation at break at low density.

Key Features and Typical Benefits:

- Excellent fuel and oil resistance
- Excellent heat resistance
- Good physical properties
- Very low compression set

Typical Physical Properties:

| | | | |
|---|---------------------|-------------------|--------|
| Appearance | | | Opaque |
| Physical State | | | Solid |
| Density | JIS K 6249 | g/cm ³ | 1.45 |
| Plasticity | JIS K 6249 | | 301 |
| 100 pbw FQE 206U fluorosilicone with 0.8 pbw 2,5-dimethyl-2,5-di(tert-butylperoxy)hexane (50%). Vulcanization conditions: 10min/170°C, post-curing: 4h/200°C in hot air | | | |
| Hardness | JIS K 6249 | Shore A | 61 |
| Tensile Strength | JIS K 6249 | MPa | 11.1 |
| Elongation at Break | JIS K 6249 | % | 310 |
| Tear Strength | JIS K 6252 Crescent | N/mm | 22 |

| | | | |
|---------------------------------|------------|---|---|
| Compression Set (22h/180 °C) | JIS K 6249 | % | 5 |
|---------------------------------|------------|---|---|

Using other peroxides might result in different mechanical properties.

| Properties After Heat Ageing (Change) | 70h/225 °C |
|--|-------------------|
| Hardness | -4 pt. |
| Tensile Strength | -32% |
| Elongation at Break | -6% |

| Properties After Oil Ageing (Change) | IRM 903 - 70h/150 °C |
|---|-----------------------------|
| Hardness | -4 pt. |
| Tensile Strength | -30% |
| Elongation at Break | -29% |
| Volume Change | 4% |

Typical properties are average data and are not to be used as or to develop product specifications.

Potential Applications:

FQE 206U fluorosilicone is an excellent candidate to consider for applications in contact with fuels, oils or greases like:

- O-Rings
- Dynamic Valves
- Diaphragms
- Seals and Gaskets

Customized ready-to-use [compounds](#) are available from Momentive Performance Materials.

Processing Considerations:

Crosslinking can be carried out with most peroxides commonly used for the press molding. While the crosslinking agent is being incorporated, the temperature of the

compound should not exceed 40°C. The rolls of the mixing mill should always be well cooled.

Packaging (how the product is contained):

FQE 206U fluorosilicone is available in 20 kg boxes.

Compliance:

FQE 206U fluorosilicone is not compositionally compliant with 21 CFR §177.2600.

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 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

Telephone

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

For literature and technical assistance, visit our website at: www.momentive.com

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