

# NEVSi™ LSR FR840

## Flame Retardant Liquid Silicone Rubber Compound

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**NEVSi LSR FR840** is a two-component liquid silicone rubber compound with a dark grey color, it has been formulated for excellent flame retardant performance equivalent to UL94 V-0 (1mm thickness) and balanced physical properties, particularly with low compression set.

For in the New Energy Vehicle market segment and other automotive applications where high temperature and high voltage environments are present. **NEVSi LSR FR840** possesses flame-retardant properties and maintains high heat resistance, insulation and self-extinguishing properties, which can reduce the risk of ignition and suppress the generation of harmful gas.

### KEY FEATURES

- Outstanding mechanical properties
- Equivalent to UL94 V-0 (1mm thickness) flame retardant performance
- Excellent heat resistance
- Low compression set
- Excellent processability

### APPLICATIONS

- UL94 V-0 specified flame retardant parts/applications
- High temperature rubber parts
- O-rings, gaskets and seals
- Connectors
- Heat resistant molded components

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### PROPERTY DATA

| Testing Items  | Standard             | Unit              | Typical Data |
|--|----------------------|-------------------|--------------|
| <b>Typical Properties of the Uncured Rubber</b>  |                      |                   |              |
|  |                      | PART A            | PART B       |
| Appearance   |                      | Dark Grey         | Dark Grey    |
| Viscosity in Pa·s $\gamma = 10 \text{ s}^{-1}$ at 20°C   | DIN 53 018           | 225               | 195          |
| <b>Typical Properties of Vulcanizate</b>   |                      |                   |              |
| <i>Mix ratio of components A:B=1:1; Press cure 10 minutes @ 175°C; Post cure 4hrs @ 200°C. The pot-life of the mixture of the two components (closed vessel) @ 20°C is three days, increased temperatures reduce the pot-life)</i> |                      |                   |              |
| Specific Gravity   | DIN 53 479 A         | g/cm <sup>3</sup> | 1.25         |
| Shore A Hardness   | DIN 53 505           | Durometer         | 40           |
| Tensile Strength   | DIN 53 504 S2        | MPa               | 6.5          |
| Elongation @ Break   | DIN 53 504 S2        | %                 | 435          |
| Tear Strength  | ASTM D 624-B         | N/mm              | 12           |
| Compression Set*   | ISO 815 / DIN 53 517 | %                 | 12           |
| Linear Shrinkage   |                      | %                 | 2.7          |
| <b>Flame Retardant Performance</b>   |                      |                   |              |
| Flame Retardant Performance  | UL94 V-0             | 1mm               | PASS         |

\* 22 hours @ 175°C

*Typical property data values should not be used as specifications. Assistance and specifications are available by contacting Momentive Performance Materials Commercial Office.*

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### HANDLING AND SAFETY

- Wear eye protection and protective gloves when handling this product.
- Cure only where appropriate ventilation systems exist.

### STORAGE

- Store in a cool and dry place out of direct sunlight.
- Keep out of the reach of children.

### PACKAGE

Both 40KG Pail kit and 400KG Drum kit are available

NEVSi LSR FR840  
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### FOR INDUSTRIAL USE ONLY

It is the responsibility of the user to determine the suitability of any Momentive Silicones product for any intended application. NEVER USE ANY Momentive SILICONES PRODUCT FOR IMPLANTATION OR INJECTION INTO THE HUMAN BODY. Specifications are available by contacting Momentive Performance Materials. Typical property data values should not be used as specifications. In as much as Momentive Performance Materials, Inc. has no control over the use to which others may put the material, it does not guarantee that the same results as those described herein will be obtained. Each user of the material should make his own tests to determine the suitability of the material for his own particular use. Statements concerning possible or suggested uses of the materials described herein are not to be construed as constituting a license under any Momentive Performance Materials patent covering use or as recommendations for use of such materials in the infringement of any patent. Material Safety Data Sheets are available upon request from Momentive Performance Materials. The contents of this catalog are subject to change without notice. No part of this data may be reproduced without the prior approval of Momentive Performance Materials.

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