

# Silastic® Q7-7870

Silicone

Dow Corning Corporation

Message:

Liquid Silicone Rubber (LSR) raw material for medical device and component fabrication in the Healthcare Industry

APPLICATIONS

Silastic® Q7-7840 Liquid Silicone Rubber, Silastic ® Q7-7850 Liquid Silicone Rubber, and Silastic ® Q7-7870 Liquid Silicone Rubber, Parts A and B, are heat-cured elastomers for use by customers fabricating medical devices, including those intended for implantation in humans for less than 30 days and non-implant applications.

Silastic Q7-7840 Liquid Silicone Rubber, Silastic Q7-7850 Liquid Silicone Rubber, and Silastic Q7-7870 Liquid Silicone Rubber are two-part platinum-catalyzed silicone elastomers specifically designed for liquid injection molding or supported extrusion. The elastomer is supplied as a two-part kit (Part A and Part B), equal portions (by weight) of which must be thoroughly blended together prior to use. The elastomers are thermally cured via an addition-cure (platinum catalyzed) reaction. When blended and cured as indicated the resulting elastomers consist of crosslinked dimethyl and methyl-vinyl siloxane copolymers and reinforcing silica.

The elastomer can be used without any post-cure. Furthermore, the cured elastomer is heat stable up to 204°C (400°F), can be autoclaved, and exhibits high gas permeability compared with most other thermoset elastomers and thermoplastics.

| General Information                      |                                  |                   |                 |
|--|----------------------------------|-------------------|-----------------|
| Features                                 | High Gas Permeability            |                   |                 |
|  | No frost                         |                   |                 |
|  | Fast curing                      |                   |                 |
|  | Good coloring                    |                   |                 |
|  | High pressure heating resistance |                   |                 |
| Uses                                     | Medical/nursing supplies         |                   |                 |
| Agency Ratings                           | EP Unspecified Rating            |                   |                 |
|  | ISO 10993-Part I                 |                   |                 |
|  | USP Class VI                     |                   |                 |
| Processing Method                        | Extrusion                        |                   |                 |
|  | Injection molding                |                   |                 |
| Physical                                 | Nominal Value                    | Unit              | Test Method     |
| Specific Gravity                         | 1.14                             | g/cm <sup>3</sup> | ASTM D792       |
| Molding Shrinkage - Flow                 | 2.3                              | %                 | Internal method |
| Hardness                                 | Nominal Value                    | Unit              | Test Method     |
| Durometer Hardness (Shore A)             | 67                               |                   | ASTM D2240      |
| Elastomers                               | Nominal Value                    | Unit              | Test Method     |
| Tensile Stress (200% Strain)             | 5.00                             | MPa               | ASTM D412       |
| Tensile Strength                         | 9.40                             | MPa               | ASTM D412       |
| Tensile Elongation (Break)               | 420                              | %                 | ASTM D412       |
| Tear Strength <sup>1</sup>               | 45.8                             | kN/m              | ASTM D624       |
| Additional Information                   | Nominal Value                    | Unit              |                 |
| Cure Rate - MDR T90 <sup>2</sup> (150°C) | 31.0                             | sec               |                 |

## NOTE

- |    |         |
|----|---------|
| 1. | B mould |
| 2. | 3 min   |

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