

Product Data

Low Compression Set Silicone Rubber Compound TSE270 series

TSE270 series is a low compression set peroxide cured silicone rubber compound for molding.

KEY FEATURES

- ◆ Low compression set
- ◆ No post cure
- ◆ 40, 50, 60 and 70 durometer grades available

APPLICATIONS

- ◆ Rolls
- ◆ O-rings
- ◆ Gaskets
- ◆ Packing
- ◆ Thick-section parts

TYPICAL PROPERTY DATA

(JIS K 6249)

| PROPERTIES | TSE270 -4U | TSE270 -5U | TSE270 -6U | TSE270 -7U |
|--|---------------------|---------------------|---------------------|---------------------|
| UNCURED PROPERTIES | | | | |
| Appearance | White | White | White | White |
| Williams plasticity | 160 | 190 | 210 | 260 |
| CURED PROPERTIES (Press cure 10min @ 170°C) | | | | |
| TC-8 curing agent % | 0.5 | 0.5 | 0.5 | 0.5 |
| MECHANICAL PROPERTIES | | | | |
| Specific gravity (23°C) | 1.08 | 1.18 | 1.29 | 1.39 |
| Hardness (Type A) | 40 | 50 | 60 | 70 |
| Tensile strength MPa {kgf/cm ² } | 4.8 {49} | 5.9 {60} | 6.7 {68} | 6.7 {68} |
| Elongation % | 330 | 300 | 260 | 260 |
| Tear strength (Angle) N/mm {kgf/cm} | 19 {19} | 18 {18} | 17 {17} | 20 {20} |
| Linear shrinkage % | 3.9 | 3.2 | 3.6 | 2.8 |
| Compression set* % | 6 | 9 | 7 | 9 |
| ELECTRICAL PROPERTIES | | | | |
| Volume resistivity MΩ·m | 1.0×10 ⁸ | 5.0×10 ⁷ | 1.0×10 ⁷ | 7.0×10 ⁷ |
| Dielectric strength kV/mm | 24 | 25 | 26 | 26 |
| HEAT RESISTANCE (72h@250°C) | | | | |
| Hardness change | +2 | -2 | +1 | 0 |
| Tensile strength change % | -8 | -12 | -12 | -14 |
| Elongation change % | +11 | +5 | 0 | -22 |

*: 180°C, 22h

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Typical property data values should not be used as specifications. Assistance and specifications are available by contacting GE Toshiba Silicones Commercial Office.

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.

PACKAGING

20kg box

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FOR INDUSTRIAL USE ONLY

It is the responsibility of the user to determine the suitability of any GE Toshiba Silicones product for any intended application. NEVER USE ANY GE TOSHIBA SILICONES PRODUCT FOR IMPLANTATION OR INJECTION INTO THE HUMAN BODY. Specifications are available by contacting GE Toshiba Silicones. Typical property data values should not be used as specifications. Inasmuch as GE Toshiba Silicones Company, Ltd. 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 GE Toshiba Silicones 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 GE Toshiba Silicones. The contents of this catalog are subject to change without notice. No part of this data may be reproduced without the prior approval of GE Toshiba Silicones.



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