

# 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, 70 and 80 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	TSE270 -8U
<b>UNCURED PROPERTIES</b>					
Appearance	White	White	White	White	White
Williams plasticity	160	190	210	260	270
<b>CURED PROPERTIES (Press cure 10min @ 170°C)</b>					
TC-8 curing agent %	0.5	0.5	0.5	0.5	0.5
<b>MECHANICAL PROPERTIES</b>					
Density (23°C) g/cm <sup>3</sup>	1.08	1.18	1.29	1.39	1.43
Hardness (Type A)	40	50	60	70	80
Tensile strength MPa {kgf/cm <sup>2</sup> }	4.8 {49}	5.9 {60}	6.7 {68}	6.7 {68}	6.3 {64}
Elongation %	330	300	260	260	190
Tear strength (Angle) N/mm {kgf/cm}	19 {19}	18 {18}	17 {17}	20 {20}	10 {10}
Linear shrinkage %	3.9	3.2	3.6	2.8	2.3
Compression set* %	6	9	7	9	17
<b>ELECTRICAL PROPERTIES</b>					
Volume resistivity Ω·cm	1.0×10 <sup>16</sup>	5.0×10 <sup>15</sup>	1.0×10 <sup>15</sup>	7.0×10 <sup>15</sup>	1.0×10 <sup>15</sup>
Dielectric strength kV/mm	24	25	26	26	22
<b>HEAT RESISTANCE (72h @ 250°C)</b>					
Hardness change	+2	-2	+1	0	0
Tensile strength change %	-8	-12	-12	-14	-20
Elongation change %	+11	+5	0	-22	-20

\*: 180°C, 22h

Typical property data values should not be used as specifications.

## 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

Issued Jan. 2000/2nd revised Sep. 2005, TSE270 series E

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### **FOR INDUSTRIAL USE ONLY**

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