

Product Data

General Purpose Silicone Rubber Compound TSE221 series

TSE221 series is a general-purpose type heat cured silicone rubber compound for molding.

KEY FEATURES

- ◆ Excellent processability
- ◆ Well balanced physical properties
- ◆ 30, 40, 50, 60, 70, 80 durometer grades available
- ◆ Flame retardant: UL94HB recognized (File No. E56745)

APPLICATIONS

- ◆ O-rings
- ◆ Gaskets
- ◆ Sheets
- ◆ Key-pads

TYPICAL PROPERTY DATA

(JIS K 6249)

PROPERTIES	TSE221 -3U	TSE221 -4U	TSE221 -5U	TSE221 -6U	TSE221 -7U	TSE221 -8U
UNCURED PROPERTIES						
Appearance	Translucent			Light gray		
Williams plasticity	120	180	220	250	280	350
CURED PROPERTIES (Press cure 10min @ 170°C; Post cure 4h @ 200°C)						
TC-8 curing agent %	0.6	0.5	0.5	0.5	0.5	0.5
MECHANICAL PROPERTIES						
Specific gravity (23°C)	1.08	1.13	1.16	1.25	1.32	1.42
Hardness (Type A)	30	40	50	60	70	80
Tensile strength MPa {kgf/cm ² }	4.8 {49}	8.4 {86}	8.7 {89}	6.6 {67}	6.8 {69}	7.0 {71}
Elongation %	470	500	350	260	220	170
Tear strength (Angle) N/mm {kgf/cm}	15 {15}	23 {23}	24 {24}	20 {20}	19 {19}	17 {17}
Linear shrinkage %	4.6	4.2	3.9	3.5	3.1	3.1
Compression set %	19	19	19	19	20	21
ELECTRICAL PROPERTIES						
Volume resistivity MΩ·m	1.0×10 ⁷	8.0×10 ⁶	1.0×10 ⁷	5.0×10 ⁶	5.0×10 ⁶	5.0×10 ⁶
Dielectric strength kV/mm	23	22	24	23	24	23
HEAT RESISTANCE (72h @ 250°C)						
Hardness change	-10	-10	-7	-7	-4	+1
Tensile strength change %	-40	-27	-26	-24	-18	-18
Elongation change %	-26	-3	-7	-14	-27	-28

*: 180°C, 22h

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

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.



GE Toshiba Silicones Co., Ltd.

GE Toshiba Silicones Co., Ltd. (Tokyo Head Office)	Phone: 81-3-3479-5355	FAX: 81-3-3479-2944
	6-2-31 Roppongi, Minato-ku, Tokyo 106-8550, Japan	
GE Toshiba Silicones (Hong Kong) Co., LTD	Phone: 852-2629-0888	FAX: 852-2629-0803
GE Toshiba Silicones (Singapore) PTE. Ltd.	Phone: 65-326-3900	FAX: 65-326-3946
Taiwan Office	Phone: 886-2-719-0510	FAX: 886-2-2719-9903