

Product Information

Technical Data Sheet

**Silicone Rubber
Compound**

TS 7000U Series

**Ultra heat resistance
purpose (low price)**

FEATURES

- Low density
- yellow-white
- heat resistance <310 °C

BENEFITS

- Pigmentable
- Suitable for molding & extruding
- Low compression set

A TS 7000U silicone rubber was designed to use in various industries area that are needed ultra heat resistance.

1. APPLICATIONS

Special rubber parts such as keypad, gasket, packing , rollers and others for high temp. condition

2. TYPICAL PROPERTIES

TS 7000 U Series

Properties	Standard	Unit	Results				
			TS 7410U	TS 7510 U	TS 7610U	TS 7710 U	TS 7810 U
Appearance	ASTM E1767		BK/WH/ BEIGE	BK/WH/ BEIGE	BK/WH/ BEIGE	BK/WH/ BEIGE	BK/WH/ BEIGE
Williams Plasticity	ASTM D926	mm/100	150	220	250	280	330
Specific gravity	ASTM D792		1.12	1.15	1.18	1.22	1.24
Hardness	ASTM D2240	Shore A	40	50	60	70	80
Tensile Strength	ASTM D412	MPa	9.0	9.9	9.6	9.5	9.4
Elongation at break	ASTM D412	%	500	400	300	250	230
Tear strength, Type C	ASTM D624	KN/m	24	25	27	27	26
Linear Shrinkage	JIS K6249	%	4.0	3.8	3.7	3.5	3.3
Compression set (175 °C, 22hr)	ASTM D395	%	18	16	16	17	15

Properties obtained using 0.8 part of SC-8B(50P)(2,5-bis(tert-butylperoxy)-2,5-dimethyl hexane) on 2mm thick slabs: molded 10 minutes at 170 °C and post-cured 4hours at 200 °C.

* **Specification writers** : These values are not intended for use in preparing specifications.

3. Aging test results (250 °C X 72hrs)

Results	200 °C X 4hrs Plus 250 °C X 72hrs				
	TS 7410 U	TS 7510 U	TS 7610 U	TS 7710 U	TS 7810 U
Change point after aging, Hardness	+1	0	+1	+1	+1
Change % after aging, Tensile St.	-24	-22	-21	-21	-20
Change % after aging, Elongation	-13	-12	-13	-10	-11

4. Aging test results (300 °C X 24hrs)

Results	200 °C X 4hrs Plus 300 °C X 24hrs				
	TS 7410 U	TS 7510 U	TS 7610 U	TS 7710 U	TS 7810 U
Change point after aging, Hardness	+4	+3	+3	+3	+4
Change % after aging, Tensile St.	-27	-26	-26	-24	-23
Change % after aging, Elongation	-28	-27	-27	-25	-24

5. Aging test results (300 °C X 72hrs)

Results	200 °C X 4hrs Plus 300 °C X 72hrs				
	TS 7410 U	TS 7510 U	TS 7610 U	TS 7710 U	TS 7810 U
Change point after aging, Hardness	+15	+15	+14	+15	+14
Change % after aging, Tensile St.	-34	-35	-33	-30	-33
Change % after aging, Elongation	-69	-67	-68	-66	-65

6. HOW TO USE

TS 7000U Series are most suitable for blending or pigmenting, milling with a two-roll mill process. Milling time should be carefully decided to secure uniformity of silicone rubber. When molding, Grace Continental Korea recommends using 0.8 to 1.2 part of SC-8B to 100 parts of silicone rubber. Standard cure temperature is 170 °C, and its cure time depends on thickness of final products. Post cure condition would be 4 hours at 200 °C after molding in most case.

For more detailed information on the use of TS 7000U Series silicone rubber, please contact Grace Continental Sales.

7. PACKING

TS 7000U Series are available in 20kg boxes

8. HANDLING PRECAUTIONS

Product safety information required for safe use is not included. Before handling, read product and safety data sheet.

9. USABLE LIFE AND STORAGE

When stored at or below 50 °C in the original unopened containers, this product has a usable life of 12 months From the date of production.

10. LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses. This product described herein have been designed, manufactured and developed solely for general industrial use only.

11. LIMITED WARRANTY INFORMATION : PLEASE READ CAREFULLY

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