

Silicone RTV Products

- Silicone Conformal coating
 - Room temperature cured Type
 - UV cured Type
- Silicone Sealant
 - Silicone Sealant(RTV)
 - Thermally conductive RTV Encapsulant
 - Thermally conductive Encapsulant

Product Data Sheet	Product Model No. SV-MC *
---------------------------	-------------------------------------

Conformal Coatings (RTV)

❖ Product Properties

Properties	Standard Value	Remarks
Base material	Silicone	
Appearance	Yellow Liquidity Paste	
Tack-free Time	Within 15 minutes	
Viscosity(cPs, at 25°C)	Reference of Product No.	
Solid Content(%)	95 ± 1.0 (105°C × 3hrs)	

❖ Viscosity According to Model No.

Model No.	Viscosity(cPs, at 25°C)	Remarks
SV-MC003*	350	
SV-MC070*	7,000	
SV-MC300*	30,000	

❖ Guarantee period of quality / Storage conditions

1. Guarantee period of quality

- ①. After 1 year from Cartridge(300ml) Production Date
- ②. After 2 weeks from the date of open Cartridge (300ml)
(It's different depending on storage site)
- ③. Pail can(20ℓ)(Sealing) : After 6 month from the date of production

2. Storage conditions

- Avoid direct rays / Storage in dry & dark place

❖ Applications



Product Data Sheet	Product Model No. SV-MC10UR
---------------------------	---------------------------------------

Conformal Coatings (Dual curing)

❖ Cure Mechanism

- UV & Room temperature
- Room temperature

❖ Base Material

- Silicone

❖ Properties of conformal coatings

Properties		Standard Value	Remarks
Appearance		Translucent Light Yellow	
Tack-free Time		2 hours after UV Curing	
Cure Method	UV Light	3,000~5,000 mj/cm ²	at 385nm
	RTV	More than 24 hours	25°C/60%
Viscosity(cPs, at 25°C)		10,000 ± 3,000	
Specific gravity		0.98 ± 0.1	
Hardness(Shore A)		30 ± 5	

❖ Features

Conformal coatings are essential for enhancing the reliability and long-term performance of electronic assemblies. They provide superior protection against:

- Dust
- Dirt
- Abrasion
- Fungus
- Moisture
- Chemicals
- Mechanical stress
- Shock and vibration

❖ Applications

- PCB Coating

Silicone Sealant (RTV)

❖ Product Properties

Properties	Standard Value	Test Method
Color	White	
Specific Gravity	1.45 ± 0.05	
Viscosity	300,000 ± 30,000(cps, at 25°C)	
Tack-Free time	Within 10minutes	
Appearance	Not foreign substance	

❖ Test Condition

1).Setting temperature & humidity for test

- Test condition is originally applied to standard temperature / humidity second level under KS M 3090 [Temperature 23±2°C & Relative humidity 50±5%]
- But due to properties of product, this product will be applied to standard temperature / humidity fifth level under KS M 3090 [temperature 20±5°C & relative humidity 65±20%]
- And it has to be registered with temperature & humidity in test report.

❖ Guarantee period of quality / Storage conditions

1. Guarantee period of quality

- ①.After 1 year from Cartridge(300ml) Production Date
- ②.After 2 weeks from the date of open Cartridge (300ml)
(It's different depending on storage site)
- ③.Pail can(20ℓ)(Sealing) : After 6 month from the date of production

2. Storage conditions

- Avoid direct rays / Storage in dry & dark place

❖ Applications



Product Data Sheet

Product Model No.

RTP-1422

Thermally Conductive RTV Encapsulant

❖ Product Properties

Properties	Unit	Value	Remark
Base Material	-	Silicone	
Appearance (2-Parts)	A Part	White	Base
	B Part	Transparent	Catalyst
Specific gravity	-	1.40 ± 0.05	ASTM D792
Hardness	Shore A	22 ± 5	-
Viscosity	cP	9,000 ± 2,700	Part A (Base)
		70 ± 20	Part B (Catalyst)
Dielectric strength	kV/mm	26	ASTM D149
Volume resistance	Ohm.cm	1 x 10 ¹⁵	ASTM D257
Tack free time	min	< 15	-
Snap time	min	10~15	-
Curing Time at RT	Hr	72	-
Thermal Conductivity	W/mK	0.4 <	ASTM D5470
Flame resistance	-	UL94-V0 Level (Self Test)	

❖ Features

- Flowable / Non-corrosive
- Room temperature curing (Alkoxy Cure) / Good dielectric strength
- Thermal stability (-55 ~ 200°C) / Excellent adhesion (Metals and Plastics)
- Solvent free / Low shrinkage

❖ How to use

▶ Mixing

- 1). RTP-1422 is supplied in two parts, 6:1 mix ratio (Part A and Part B) by weight.
- 2). When fully blended, the Part A and Part B liquid mixture should have a uniform appearance.
- 3). The Presence of bright-colored stripes or marbling indicates that mixing is insufficient and curing will be incomplete.

▶ Processing and Curing

- 1). A fully mixed RTP-1422 can be injected/dispensed directly into the junction box or module container.
- 2). Care must be taken to minimize air trapped.
- 3). Where possible, injection/dispensing should be carried out in a vacuum.

Product Data Sheet

Product Model No.

SV-PTG100* / -PTG200*

Thermally Conductive Encapsulant

❖ Product Properties

Uncured Properties	Unit	SV-PTG100		SV-PTG250	
		A	B	A	B
Base Material	-	Silicone Free		Silicone Free	
Appearance	-	White	Dark gray	White	Dark gray
Viscosity (at 23°C)	cps	50,000	300,000	70,000	450,000
Mix ratio by weight	-	1 : 1		1 : 1	
Pot Life (at 25°C)	minutes	< 30		< 30	
Cure Time (at 25°C)	Hour	48		48	
Shelf Life (at 25°C)	months	6	6	6	6

Cured Properties	Unit	SV-PTG100	SV-PTG200
Appearance (Mixed)	-	Gray	Gray
Hardness	Shore 00	80±10	80±10
Specific Gravity	-	2.2	2.7
Dielectric strength	KV/mm	10	10
Volume Resistivity	Ω·cm	10 ¹²	10 ¹²
Continuous Use Temp.	°C	-40~80	-40~80
Thermal Conductivity	W/mk	1.0	2.5

❖ Applications

- Telecommunications
- Automotive electronics
- Computer and peripherals
- Power conversion
- Between heat-generating semiconductors and a heat sink
- Area where heat needs to be transferred to a frame, chassis, or other type of heat spreader

www.siliconevalley.co.kr
(siliconevalley@siliconevalley.co.kr)

34, Gongdan 4-gil, Gimcheon-si, Gyeongsangbuk-do, 39537 Korea
TEL : +82-54-437-0878
FAX: +82-54-437-0879

Head office & Factory-1



Factory-2

