

Curing Catalyst for Silicone Varnish

CR12, CR13, CR15

CR12, CR13 and CR15 are curing catalysts for TSR116, TSR117 and TSR144, silicone varnish for electrical and paints use.

KEY FEATURES

- CR12 is a metal complex type.
- CR13 is a tetra-alkyl ammonium salt type.

Silicone varnish can be cured at low temperature by using CR12 or CR13.

- CR15 is an aminoalkylalkoxysilane.

Silicone varnish can be cured at room temperature by using CR15.

TYPICAL PROPERTY DATA

PRODUCT	APPEARANCE	SOLID CONTENT %	pH	FLASH POINT °C	SOLVENT
CR12	Purple, liquid	13	9.3	11.5	Methanol
CR13	Light yellow, transparent, liquid	10	9.0	44	Ethyl cellosolve
CR15	Yellow, transparent, liquid	100 (effective content)	-	84	No solvent

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

INSTRUCTIONS FOR USE

- CURING AT LOW TEMPERATURE (100-150°C)

TSR116, TSR117 and TSR144 can be completely cured without stickyness at 100~150°C, with the addition of CR12 or CR13.

20g of CR12 and 100g of n-butanol, or 10g of CR13 and 100g of n-butanol are added to 1kg of the varnish. The pot life of the catalyzed varnish is about 2 months at room temperature.

The curing ability of TSR117 with the addition of CR12 or CR13

Temperature	° C	70	90	110	130	150
Curing time	min	150	40	15	5	below 5
Curing time to non-adhesiveness (200° C)*	h	-	-	3	1	0.5

*: A sheet of asbestos paper (0.3mm in thickness, 25.45 100mm) is placed on the cured film, loaded with 125g of weight for 15minutes at 200°C, and then the time that cured film does not adhere to the asbestos paper is measured and shown in the table.

Note; It takes a little longer time for TSR116.

• CURING AT ROOM TEMPERATURE

TSR116, TSR117 and TSR144 can be cured at room temperature with the use of curing catalyst CR15, The curing ability of the paint film and the pot life of a varnish with the addition of CR15 is shown in the following table.

Varnish (NV50%)	CR15	Diluent (xylene)	Curing time (25° C) h	Pot life (25° C) h
100 part	2 part	-	7	1-2
100 part	2 part	70 part	7	8-16

PRECAUTIONS FOR USE

- Wear eye protection, protective gloves, and respiratory protection while handling the product.
- Use the product in a well ventilated area by operating local ventilating equipment.
- Since the product is flammable, strictly prevent the use of devices that may cause fire.
- Since the pot life varies depending on the added quantity of the curing catalyst or the condition of room temperatures, check it before use.

PRECAUTIONS FOR STORAGE

- Avoid direct sunlight and store the product in a dark and cool area with little moisture.
- Keep out of the reach of children.

PACKAGING

- **CR12: 360g, bottle available in case of 10**

- **CR13: 500g bottle available in case of 10**
14kg can available
- **CR15: 100g bottle available in case of 20**
500g bottle available in case of 10