

SILICON VARNISH

[single-component]

Applications:

- Seismic, automobile, vibration control, braking, Control engineering, avionics, instrumentation, sintering, sputtering
- **Resistance** /environmental/toxicology/polymers/heavy electrical engineering, MEMS, heat sink
- Paints/nuclear/power plant/process control & chemical engineering, packaging, optics,H.F.transformers

Introduction & Operation Principle:

MSML series of organo-silicon varnishes are single part. These exhibits high shear yield stress/hardness/corrosion resistant/thermally stable and other improved thermal conducting properties. These varnishes are available in more than 10 grades with different specifications virtually meeting all industrial/research-development specifications. These are available for some critical physical conditions like cryogenic/high temperature range meeting other related corrosion/environmental/tribological/chemical and thermodynamical aspects. Tailor-made lacquers solutions are always encouraged.

Benefits:

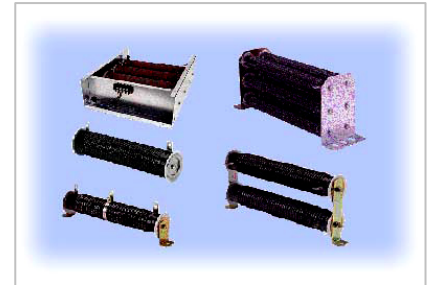
- High flash temperature / Better temperature operating range.
- High dynamic yield stress/high performance to hard setting.
- Easy re-mixing / low off state viscosity.
- Non-abrasive/ chemically compatible.
- High thermal conductivity with electrical resistance.
- Negligible expansion with least pinhole formation in bond.
- Low weight loss during curing. /High scratch resistance.



MSML-0250(10 litres)



power resistance coating (MSML-300)



power resistance coating MSML-0300H

Mechanical/Electrical Specifications:

Base [two part/single part]	Organo-silicon Single
Mixing ratio [Laquer]	10 pm/MTH300
Antisettling%/Thinner	Ceramics
Filler	31
CTE unit volume [in/in/° Fx10⁻⁶ (° F)	0.65
Specific Heat J/g°C	0.82
Viscosity pa-s@10 s⁻¹ shear rate	2H
Hardness	
Operating temperature °C(max)	300
Curing - duration-15/30/60 min [max]-	220°C/30 +300°C/30.
Thermal conductivity (10⁴ W/m².°C)	10
Electrical resistivity [mega-ohm]	10 ³⁻⁴
Color [laquer](may vary)	water color (vitreous/non-vitreous)
Pot life [hrs]-options	08



Silicon Glazed coating

Data is calculated with and without silicon laquers applied and may vary from lot to lot.

Above laquers are available in low/high voltage version. Last two numerals- 01(low voltage or medium voltage) and 02 (high voltage).

Customer is advice to add fillers in ratio 10:5 by weight to laquer.

Application notes:

Keep the silicon laquers fluid in cool.

Minimum ordering quantity is 30 litres.

All the surfaces must be clean and preconditioned before its use.

Above curing schedule is found on larger size of bonding area and with bigger substrate. It may alter and may be adjust by some trial.

In most of the cases as per experience, fine application of adhesive to around 100 micron to both the surface bring better bonding.

Silicon/ceramic laquers may cause irritation in some sensitive persons, use gloves/ goggles.

Company makes no warranty expressed or implied, concerning the use of this product and users shall assumes all risk of use or handling whether or not in accordance with directions suggestion, or used singly or in combination with other product.

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