



Product Information

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MS-745 / 745M / 747 Vertrel™ X-Si Silicone Solvent

Description:

MS-745 and MS-747 Vertrel™ X-Si Silicone Solvent is a proprietary blend of Vertrel™ XF hydrofluorocarbon and hexamethyldisiloxane. It is ideally suited for use in medical applications as a solvent for cleaning or depositing silicone oil-based lubricants. It is also used as a swelling media for silicone rubber tubing.

Advantages:

- Evaporates quickly
- Compatible with most plastics, elastomers and metals
- Non ozone depleting
- Exempted as a volatile organic compound (VOC)
- RoHS Compliant

Physical Properties:

(Measured @ 77°F, except for Flash Pt testing)

Liquid density.....	1.05 kg/l
Boiling point.....	134°F/57°C
Vapor pressure.....	0.178 atm
Surface tension.....	0.014 N/m
Viscosity.....	0.60 cPs
Heat of vaporization	159.0 kJ/kg at boiling pt.
Flash point.....	<-18°C Pensky-Martens Closed Cup <0°C Tag Open Cup

For most applications using MS-747, parts are immersed in the solvent at room temperature. The solvent evaporates quickly, thus it is recommended that the vapor-to-air interface area be minimized and/or the solvent be cooled to promote efficient and effective use. If there is a need to use the solvent at higher temperatures, a flammable rated, single sump vapor degreaser can be used. The MS-747 is not an azeotrope, and should **not** be used in a two-sump vapor degreaser as components of the blend may separate.

Note: MS-745, MS-745M and MS-747 material have flammability characteristics. It is recommended that these products should be used in appropriately rated areas and equipment.

Solubility of Typical Silicone Fluids:

(% Oil Loading in Solvent) *As manufactured by Dow Corning	
DC-200*	14
DC-360*	21
DC-500*	33
DC-1107*	45
NuSil Med 4159	28

Swelling of Polysilicone Tubing:

At Room Temperature

% Change in Width	15
% Change in Weight	60

At Boiling Point 134°F/57°C

% Change in Width	20
% Change in Weight	64

This is very desirable from the viewpoint of solvent consumption as well as a faster recovery of the polysilicone tubing to its original state.

Plastic Compatibility:

(Immersion: 15 Minutes at Room Temperature)

Polyethylene	Acetal
Polyphenylene Oxide, PPO	Epoxy
Polyester, PET,PBT	Liquid Crystal Polymer
Polyimide, PI,PEI,PAI	Phenolic
Polyetherketone, PEK	PTFE, ETFE
Polyaryletherketone, PEEK	CPVC, PVC
Polyarylsulfone	Ionomer
Polypropylene	Polystyrene
ABS	Cellulosic
Acrylic	

Elastomer Compatibility:

(Immersion: 15 minutes at Room Temperature)

Buna N, NBR, Nitrile	Buna S, SBR, GRS
Butyl Rubber, IIR	Chlorosulfonated PE
EPM, EPDM	Polysulfide
Natural Rubber, Isoprene	Neoprene
Polyurethane	

Incompatible with Silicone and Viton™ B

Metal Compatibility:

They are very stable with most common metals such as aluminum, copper, zinc, carbon steel, and stainless steel. Contact with highly basic process material, pH 10 or above, is not recommended.

Note: Test for compatibility before use.

Safety Data Sheets (SDS) are available upon request.

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