

Technical Bulletin

Product: Wondermask P

DESCRIPTION

Wondermask P is a temporary, peel-able solder mask comprised of a thixotropic, synthetic acrylic latex designed to withstand fluxing, wave soldering and cleaning operations. Unlike natural latex mask, it contains no offensive ammonia and hence is non-corrosive to copper, gold, silver or pre-soldered surfaces. In addition, stability problems are averted. When applied, the product is opaque pink, and when cured, becomes completely translucent red. Cured mask can be used for masking conformal coatings. May be used in applications such as robotic, pneumatic, hand applied or template screening (not recommended for silk screening).

Wondermask is the industry-leading temporary solder mask brand because of quality and versatility. Depending on the product, mask can be peeled off manually or washed off in a batch or inline system.

Wondermask has a number of useful applications in PCB assembly:

- Thru-hole masking – Prevent soldering open holes in a wave soldering process by covering with Wondermask.
- Conformal coating masking – In a conformal coating dipping or spraying process, Wondermask can be used to cover connectors and other components and areas that should not be coated.
- Temporary component adhesive – Wondermask can be used to tack down components on double-sided PCBs.

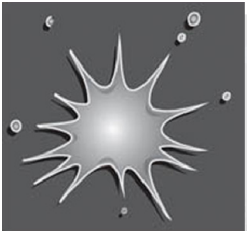
FEATURES AND BENEFITS

- Non-ammoniated.
- Non-Flammable.
- Non-ozone depleting.
- Easily peelable.
- Low odour.
- Withstands lead-free soldering temperatures up to 640°F (343°C) in wave soldering process.
- Cure indicator: Darkens as curing
- Compatible with gold & copper leads.
- Non-corrosive.
- Specification: MIL-STD-2000 Para: 5.3.18 - a, b & d
- ROHS compliant
- Can be cured in pre-heat



HEALTH & SAFETY

For detailed information refer to the Health and Safety Data Sheet (MSDS) available on request.



SOLDER CONNECTION

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APPLICATION METHODS

For best results: apply a 20-30mm coating to desired area. The substrate should be free from grease, oil and particulates. Drying times depend on ambient humidity. Under normal conditions Wondermask P is ready for preheating stage in 1 hour, however, cure can be accelerated to 30 minutes at 65° C/100°F or 20 minutes at 82°C./180°F. Do not over cure, as blistering of mask can occur, causing removal problems. Mask will change from an opaque pink to a translucent red when complete cure is accomplished. Mask does not have to be completely cured to withstand soldering operation, however it should be completely translucent before removal.

TECHNICAL INFORMATION

Chemical & Physical Properties

Appearance	Pink viscous gel
Odor	Low odor
Flash Point	none
VOC (EPA)	28 g/l

Chemical Composition

CHEMICAL NAME	CAS #
Acrylic Latex Polymer	27401-61-2
LECIITHIN	8029-76-3
Alkoxylated alkylphenol	9064-13-5
Tetrakis-[methylene(3,5-di-tert-butyl-4-hydroxyhydrocinnamate)]-methane	6683-19-8
2-Propenoic acid, telomer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid monosodium salt and sodium hydro	97953-25-8

Performance & Application Data

Application	Template, hand, pneumatic, robotic
Viscosity	28,000-30,000 cps
Suggested thickness	20-30 mils
Thinner	DI water
Cure time	1 hr. Ambient, 30 min. @65° C, 20 min. @82° C
Removal	Peelable

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