

LOCTITE MSC 1000S

Formerly known as SPOT-ON
August 2017

PRODUCT DESCRIPTION

LOCTITE MSC 1000S provides the following product characteristics:

Technology	Temporary Solder Resist
Application	Soldering
Color	Opaque white liquid
Odor	Ammoniacal

LOCTITE MSC 1000S is a peelable, temporary solder resist designed to be applied to the printed circuit board prior to soldering to mask areas where components need to be placed after wave soldering. It is formulated to withstand fluxing and wave soldering applications. This material can be used in conjunction with fluxes whose residues do not require removal after soldering.

FEATURES AND BENEFITS

- Easily peelable
- Withstands high temperatures
- Long shelf life
- Thixotropic - holds position
- Non-flammable
- Non-ozone depleting
- Compatible with gold finishes
- Non-corrosive

APPLICATIONS

- LOCTITE MSC 1000S is suitable for hand, robotic, pneumatic or template screening applications. This material should be removed after soldering by peeling off.
- LOCTITE MSC 1000S can also be applied by brush.
- It is particularly suited for use on gold, silver or pre-soldered surfaces.
- This material can be used on copper but some surface degradation and/or drop in solderability may be observed. It is therefore recommended that LOCTITE MSC 1000CUS be used for copper surfaces.

RECOMMENDED OPERATING CONDITIONS

- The substrate should be free of grease, oil, and particulates.
- LOCTITE MSC 1000S should be applied at a liquid coating thickness of 2.0 mm (80 thou) to ensure a coherent film for ease of subsequent removal as it dries to a thinner coating.
- Drying times depend upon ambient humidity and temperature. Under normal conditions LOCTITE MSC 1000S is ready for the soldering process in two hours. This may be accelerated to 40 minutes at 80°C (180°F).

LOCTITE MSC 1000S must be completely dry prior to wave soldering to ensure complete removal post soldering.

Do not over cure, as blistering of mask can occur, causing removal problems.

RECOMMENDED CURE

Recommended Application Thickness, mm 2.0

Typical Cure Time
2 hours @ 25°C
40 minutes @ 80°C

Removal

Must be removed. Peel off, DO NOT ATTEMPT TO WASH OFF (not soluble in water or other solvents).

PACKAGING

LOCTITE MSC 1000S is available in 250 ml bottles .

STORAGE AND SHELF LIFE

LOCTITE MSC 1000S has a 1 year shelf life at room temperature. It is important that this material is not stored below 5°C to prevent irreversible separation of the material.

GENERAL INFORMATION

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

Not for Product Specifications

The technical information contained herein is intended for reference only. Please contact Henkel Technologies Technical Service for assistance and recommendations on specifications for this product.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

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