

# 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

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

**Disclaimer****Note:**

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

**In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:**

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

**In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:**

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

**In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:**

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

**Trademark usage:** [Except as otherwise noted] All trademarks in this document are trademarks and/or registered trademarks of Henkel and its affiliates in the U.S. and elsewhere.

Reference 3

Americas  
+1.888.943.6535

Europe  
+32.1457.5611

Asia  
+86.21.2891.8000

For the most direct access to local sales and technical support visit: [www.henkel.com/electronics](http://www.henkel.com/electronics)