## CHEMTRONICS Technical Data Sheet

TDS# CHT

## Chemask®HT High Temperature Solder Masking Agent

The high temperature, peelable, temporary mask safe for use on sensitive metals

#### PRODUCT DESCRIPTION

Chemask<sup>®</sup> HT is a fast curing, peelable temporary spot mask formulated for safe use for long term heat protection at elevated temperatures. Chemask<sup>®</sup> HT may be used to protect pins, posts, contacts and edge connections in the solder reflow oven or during conformal coating processes.

- Stable to 550°F (288°C)
- Stable at long temperature exposure up to 300 °F
- For lead-free or tin/lead processes
- Phthalate-free, low toxicity and environmentally safe
- Compatible with rosin, water soluble fluxes and cleaning solvents
- Dries tack free in 15 minutes
- Goes straight into the pre-heat oven
- Removes easily and leaves no residue
- Non-contaminating, non-staining and noncorrosive
- Compatible with gold, copper, nickel, silver and OSP finishes
- RoHS compliant

#### TYPICAL APPLICATIONS

Chemask® HT protects:

- Protects component-free areas during wave and reflow soldering
- Components and pin connectors
- Temperature sensitive components during wave or reflow soldering

## TYPICAL PRODUCT DATA AND PHYSICAL PROPERTIES

| Base Material                          | Synthetic Resin         |  |
|--|-------------------------|--|
| Color                                  | Green                   |  |
| Odor                                   | Odorless                |  |
| Flux Compatibility                     | All Types               |  |
| <b>Process Compatibility</b>           | Wave soldering & Reflow |  |
| <b>Solder Compatibility</b>            | Lead-free & Tin/Lead    |  |
| <b>Temperature Stability</b>           | 550°F                   |  |
| Tack-Free Drying Time (10 mils @ 77°F) | 15 min.                 |  |
| Cure Time<br>(10 mils @ 77°F)          | 30 min.                 |  |
| Viscosity @ 77°F                       | 50,000 cps              |  |
| Viscosity Adjusted With                | DI water                |  |
| Flash Point                            | Nonflammable            |  |
| Weight/Gallon                          | 8.75 lbs.               |  |
| Shelflife                              | 2 years                 |  |
| RoHS compliant                         | Yes                     |  |

#### **COMPATIBILITY**

Chemask<sup>®</sup> HT is generally compatible with most materials used in printed circuit board fabrication. As with any solder masking agent, compatibility with substrate should be determined on a non-critical area prior to use.

# APPLICATION METHODS Squeeze Bottle/Syringe Yes Spatula Yes Screening Yes Automatic Dispensing Yes Removal By hand Clean-up before curing Use water

#### USAGE INSTRUCTIONS

For industrial use only.

Read MSDS carefully prior to use.

Chemask<sup>®</sup> HT solder masking agent is engineered for all electronic manufacturing applications. When applying by hand using squeeze bottle or spatula, insure that all areas of the pre-tinned hole are evenly covered on the side to be soldered. Automatic dispensing equipment may also be used as appropriate. Chemask<sup>®</sup> HT may also be screen printed. Depending on ambient conditions, temporary mask may remain on assemblies for extended periods of time prior to processing.

#### **REMOVAL:**

After allowing the Chemask® HT to fully cure, the temporary mask can be removed by hand or using tweezers. When removing after long term heat exposure allow the surface 5 minutes to cool before removal.

#### **AVAILABILITY**

CMHT8 8 oz. Squeeze Bottle CMHT1 1 Gal. Liquid

## TECHNICAL & APPLICATION ASSISTANCE

Chemtronics provides a technical hotline to answer your technical and application related questions. The toll free number is **1-800-TECH-401**, or e-mail us at AskChemtronics@chemtronics.com.

Chemtronics is also accessible on the web. Visit us at www.chemtronics.com.

#### ENVIRONMENTAL IMPACT DATA

| ENVIRONMENTAL IMPACT DATA |      |     |      |  |
|---------------------------|------|-----|------|--|
| CFC                       | 0.0% | VOC | 0.0% |  |
| HCFC                      | 0.0% | HFC | 0.0% |  |
| GWP                       | 0    | ODP | 0.0  |  |

CFC, HCFC, VOC, and HFC numbers shown are the content by weight. Ozone depletion potential (ODP) is determined in accordance with the Montreal Protocol and U.S. Clean Air Act of 1990. The ODP of this product is 0.0. It is the sum of the ODP of the substances that may contribute to the depletion of stratospheric ozone, based upon the weight of each substance in the product's formulation. Global warming potential (GWP) is calculated based on a 100 year time horizon. Carbon dioxide has a GWP of 1.

#### NOTE:

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. CHEMTRONICS does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.

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