## Chemtronics

## Technical Data Sheet

## Chemask ${ }^{\circledR}$ WF <br> Solder Masking Agent

## Product\# CWF8, CWF1

## Product Description

Chemask WF Solder Masking Agent is a high temperature temporary spot mask that protects component-free areas from molten solder during wave soldering. It is water soluble, designed to be removed with open and closed loop aqueous cleaning systems. Chemask WF is low foaming and has no effect on deionized water (DI) system resin beds. This water soluble formulation is stable to rosin, organic and inorganic fluxes.

- Protects boards from molten solder to $515^{\circ} \mathrm{F}\left(268^{\circ} \mathrm{C}\right)$
- Waste stream filterable with micron bags
- Prolongs deionized water system life
- Low foaming
- Compatible with most flux types
- Leaves no corrosive residue
- Does not contain Methanol
- Non-contaminating
- Patent No. 6,207,265


## Typical Applications

During wave soldering, Chemask WF Solder Masking Agent protects:

- Component Free Areas
- Gold Connectors
- Gold Fingers
- Pin Connectors


Typical Product Data and Physical Properties

| Base Material | Synthetic Resin |
| :--- | :--- |
| Color | White |
| Flux Compatibility | All types |
| Temperature Stability | $515^{\circ} \mathrm{F} / 268^{\circ} \mathrm{C}$ |
| Tack-Free Drying Time <br> $\left(10\right.$ mils @ $\left.77^{\circ} \mathrm{F} / 25^{\circ} \mathrm{C}\right)$ | 30 min. |
| Cure Time <br> $\left(10\right.$ mils @ $\left.77^{\circ} \mathrm{F} / 25^{\circ} \mathrm{C}\right)$ | 1 hour |
| Viscosity $\left(@ 77^{\circ} \mathrm{F}\right)$ <br> $( \pm 500$ cps $)$ | $20,000-28,000 \mathrm{cps}$ |
| Viscosity Adjusted With | Dionized water |
| Solids Content | $\sim 40 \%$ |
| Flash Point | None |
| Weight/Gallon | 8.8 lbs. |
| Shelflife | 1 year |
| RoHS Compliant |  |

RoHS Compliant

## Chemask ${ }^{\circledR}$ WF Solder Masking Agent

## Product\# CWF8, CWF1

Compatibility
Chemask WF Solder Masking Agent is generally compatible with most materials used in printed circuit board fabrication. As with any solder masking agent, compatibility with substrate must be determined on a non-critical area prior to use.

| Application Method |  |
| :--- | :--- |
| Squeeze Bottle/Syringe | Yes |
| Spatula | Yes |
| Screening | Yes |
| Stencil | Yes |
| Automatic Dispensing | Yes |

## Usage Instructions

For industrial use only. Read SDS carefully prior to use. When applying by hand using squeeze bottle, syringe or spatula, insure that all areas of the pre-tinned hole are evenly covered on the side to be soldered. For screening applications, properly clean and prepare screen, then apply masking agent in the same manner as solder paste. Automatic dispensing equipment may also be used as appropriate. Allow an hour to fully cure a 10 mil thick application. Thicker applications will require additional cure time. Rapid cure can be achieved in a $120^{\circ} \mathrm{F} / 120^{\circ} \mathrm{C}$ oven.

REMOVAL: After allowing the mask to become fully cured, the mask may be washed away in an open or closed loop aqueous cleaning system with water temperature at a minimum $120^{\circ} \mathrm{F} / 49^{\circ} \mathrm{C}$ under agitation. If using a recirculating system, install a minimum 10 micron bag filter before the resin beds. Detergents may be used to increase cleaning efficiency.

| Availability |  |
| :--- | :--- |
| CWF8 | 8 fl. oz. / 236 mL Liq |
| CWF1 | 1 gal. / 3.7 L Liquid |
|  |  |
| Environmental Impact Data |  |
| CFC | $0.0 \%$ |
| HCFC | $0.0 \%$ |
| CL Solv. | $0.0 \%$ |
| VOC | $5.0 \%$ |
| HFC | $0.0 \%$ |
| ODP | 0.00 |

CFC, HCFC, CL. SOLV., 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 zero.

## Technical and Application Assistance

Chemtronics provides a technical hotline to answer your technical and application related questions. The toll free number is: 1-800-TECH-401.

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.

