

Electronics



Chemask® NA - Non-ammoniated

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

- Will not affect gold, copper, nickel, silver and OSP finishes
- For lead-free or tin/lead processes
- Stable to 550° F (288°C)
- Phthalate-free, low toxicity and environmentally safe
- Compatible with rosin, no-clean and water soluble flux types
- Dries tack free in 15 minutes
- Can be placed directly into pre-heat oven without waiting
- Removes easily and leaves no residue
- Non-contaminating, non-staining and noncorrosive
- RoHS compliant

Applications:

- Engineered for use with bare copper, silver, and other reactive metals
- Ideal for SMT applications

CNA8 8 fl oz / 236 ml liquid squeeze bottle

CNA1 1 gal / 3.7 L liquid



Chemask® NA
Non-Ammoniated Solder Masking Agent

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

PRODUCT DESCRIPTION

Chemask® NA Non-Ammoniated Solder Masking Agent is a fast curing, peelable temporary spot mask formulated for safe use on sensitive metals. It contains high-temperature resistant compounds that protect component-free areas during wave soldering. Chemask® NA 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)
- 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 non-corrosive
- Compatible with gold, copper, nickel, silver and OSP finishes
- RoHS compliant

TYPICAL APPLICATIONS

Chemask® NA 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
Process Compatibility	Wave soldering & Reflow
Solder Compatibility	Lead-free & Tin/Lead
Temperature Stability	550°F
Tack-Free Drying Time (10 mils @ 77°F)	15 min.
Cure Time (10 mils @ 77°F)	30 min.
Viscosity @ 77°F	200,000 cps
Viscosity Adjusted With	DI water
Flash Point	Nonflammable
Weight/Gallon	8.5 lbs.
Shelflife	3 years
RoHS compliant	Yes

COMPATIBILITY

Chemask® NA 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[®] NA 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[®] NA 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[®] NA to fully cure, the temporary mask can be removed by hand or using tweezers.

AVAILABILITY

CNA8 8 oz. Squeeze Bottle

CNA1 1 Gal. Liquid

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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SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Information: 800-TECH-401

Product Identification

Chemask NA Non-Ammoniated Temporary Spot Mask

Product Code: CNA8, CNA1

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Product Ingredient Information	CAS#	Wt. % Range
Deionized water	7732-18-5	45.0-55.0
Acrylic polymer	mixture	35.0-45.0
Polyurethane resin	proprietary	1.0-5.0
diethylene glycol dibenzoate	120-55-8	1.0-5.0
dipropylene glycol dibenzoate	27138-31-4	1.0-5.0
titanium dioxide	13463-67-7	0.1-1.0

SECTION 3: HAZARD IDENTIFICATION

Emergency Overview: Viscous, opaque green liquid. This product is not flammable. Liquid may irritate eyes and skin under repeated or prolonged exposure.

Potential Health Effects:

Eyes: Liquid and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation.

Skin: Contact causes skin irritation. Sensitizer - may cause allergic skin reaction.

Ingestion: Harmful if swallowed. Irritating to mouth, throat and stomach. May cause nausea, vomiting, and diarrhea.

Inhalation: High concentrations of vapors may cause headaches, nausea, dizziness, and respiratory irritation if inhaled.

Pre-Existing Medical Conditions Aggravated by Exposure: Lung, eye, skin

SECTION 4: FIRST AID MEASURES

Eyes: Immediately flush with large amounts of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel if irritation develops or persists.

Skin: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists. Wash clothing separately before reuse.

Ingestion: If swallowed, seek medical attention immediately.

Inhalation: In case of exposure to high concentrations of vapor, remove to fresh air. If breathing is difficult, give oxygen and get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point: None to boiling (TCC)

LEL/UEL: NA (% by volume in air)

Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

Fire Fighting Instructions: As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Large Spills: Shut off leak if possible and safe to do so. Wear self-contained breathing apparatus and appropriate personal protective equipment. Absorb spill with inert absorbant material, then place in a chemical waste container for proper disposal. Do not flush to sewer. Avoid runoff into storm sewers and ditches which lead to waterways.

Small Spills: Absorb spill with absorbent material, then place in a chemical waste container for proper disposal.

SECTION 7: HANDLING AND STORAGE

Avoid prolonged or repeated contact with eyes, skin, and clothing. Wash hands before eating. Use with adequate ventilation. Avoid breathing product vapor.

Do not reuse this container. Store in a cool dry place away from heat, sparks and flame. Keep container closed when not in use. Do not store in direct sunlight.

KEEP OUT OF REACH OF CHILDREN.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

CHEMICAL NAME	ACGIH TLV	OSHA PEL	ACGIH STEL
Acrylic polymer	NA	NA	NA
Polyurethane resin	NA	NA	NA
diethylene glycol dibenzoate	NA	NA	NA
dipropylene glycol dibenzoate	NA	NA	NA

Work/Hygienic Practices: Good general ventilation should be sufficient to control airborne levels. Wear safety glasses with side shields (or goggles) and rubber or other chemically resistant gloves when handling this material.

NFPA and HMIS Codes:	NFPA	HMIS
Health	1	1
Flammability	0	0
Reactivity	0	0
Personal Protection	-	B

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Opaque green, viscous material
Odor: None
Vapor Pressure: NA
Vapor Density: NA
pH: 6.0-8.0
Boiling Range: >212°F

Solubility in Water: Dispersible
Specific Gravity: 1.22
Evaporation Rate: >1
(Butyl Alcohol= 1)
Viscosity: NA
Percent Volatile: <0.5

SECTION 10: STABILITY AND CHEMICAL PROPERTIES

Stability - Stable.

Conditions to Avoid: Storage above 120° F, exposure to light, loss of polymerization inhibitor, contamination with incompatible materials.

Incompatibility: Do not mix with powdered alkali and alkaline earth metals or strong oxidizing agents.

Products of Decomposition: Thermal decomposition may release carbon monoxide, carbon dioxide, HCN, and hydrocarbons.

Hazardous Polymerization: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

Inhalation: Not available

Ingestion: Not available

Skin: Not available

Cancer Information: No ingredients listed as human carcinogens by NTP or IARC

Reproductive effects: none

Teratogenic effects: none

Mutagenic effects: none

SECTION 12: ECOLOGICAL INFORMATION

Environmental Impact Information

Avoid runoff into storm sewers and ditches which lead to waterways. Water runoff can cause environmental damage.

REPORTING

US regulations require reporting spills of this material that could reach any surface waters. The toll free number for the US Coast Guard National Response Center is:

1-800-424-8802

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all federal, state and local regulations. Water runoff can cause environmental damage.

SECTION 14: TRANSPORTATION INFORMATION

Air: Coating Compound, Not Regulated

Ground: Coating Compound, Not Regulated

SECTION 15: REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).

None

This information should be included on all MSDSs copied and distributed for this material.

TOXIC SUBSTANCES CONTROL ACT (TSCA)

All ingredients of this product are listed on the TSCA Inventory.

CALIFORNIA PROPOSITION 65: WARNING: This product contains formaldehyde, a chemical known to the state of California to cause cancer.

WHMIS: Class D2B

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16: OTHER INFORMATION

Normal ventilation for standard manufacturing practices is usually adequate.

To the best of our knowledge, the information contained herein is accurate. However, all materials may present unknown hazards and should be used with caution. In particular, improper use of our products and their inappropriate combination with other products and substances may produce harmful results which cannot be anticipated. Final determination of the suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist.