Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Peelable Solder Masks
862 Technical Data Sheet

Description

Our 862 *Peelable Solder Mask* is a synthetic latex product for temporary masking of circuit areas and contacts against solder, rosin, cleaning fluids. It provides effective protections of contacts, gold fingers, printed circuit card edges and it can be easily peeled off once the wave soldering process is done, after a subsequently applied conformal coating is sufficiently dry.

Applications & Usages

The 862 mask can be applied by hand or using by template screening, but not by silk screening. It can also be applied using robotics or pneumatics systems.

Features and Benefits

- **Withstands Wave Soldering**
- **Non-Corrosive**—Safe for copper, gold, silver, and solder joints
- **Solvent Solubility** —Largely insoluble once cured (flux and cleaning solvent resistant)
- **Water Soluble**—Can be thinned with deionized (D.I.) water to adjust viscosity
- **Immersion Resistant**—insoluble once cured
- **Room Temperature Cures** or **Quick Heat Curing**
- **Cure Monitoring Color Change**—Changes from opaque pink to translucent red once cured
- **Ammonia Free**—Does not discolor copper traces

Curing & Work Schedule

Properties	*Value*
Full Cure @room temp.	60 min
Full Cure @65 °C [149 °F]	30 min
Full Cure @80 °C [176 °F]	20 min
Shelf Life	3 y

Coverage and Limits

Properties	*Value*
Max Intermittent [a)] Withstand Temperature	250 °C [482 °F]
Coverage per tube [b)]	2 400 cm^2 [2.6 ft^2]

a) A 5 min excursion at the maximum withstand temperature of 250 °C results in a mask weight loss of about 15%.

b) Idealized estimate based on a coat thickness of 500 μm [20 mil].

Date: 24 October 2014 / Ver. 1.02

Chemical Components

Name	***CAS Number***
Acrylic Latex Polymer	*27401-61-2*
Alkoxylated alkyl phenol	*9064-13-5*
Leciithin	*8029-76-3*
C7–C9 Alkyl Benzyl Phthalate	*68515-40-2*
Sodium hydrogen sulfite 2-(acryloylamino)-2- methyl-1-propanesulfonate -acrylic acid (2:1:1:1)	*97953-25-8*

Properties of Cured 862

Physical Properties	***Method***	***Value***
Color	Visual	Red, translucent
Odor	Olfactory	Low
Aqueous Solubility	—	Insoluble
Solvent Solubility		Low or insoluble
Weight Loss @ 200 °C, rate 10 °C/min	TGA	2.0%
225 °C, rate 10 °C/min	TGA	4.3%
250 °C, rate 10 °C/min	TGA	7.7%
Wave Solder Tolerant		Yes
Peelability		Excellent

a) Will not readily dissolve in most organic solvents.

Properties of Uncured 862

Physical Property	***Method***	***Value***
Color	Visual	Pink, opaque
Odor	Olfactory	Low
Thickness Recommendation		500–760 µm[20–30 mil]
Viscosity	Brookfield SP1	29 000 cP [29 Pa·s]
Density	ASTM D 1475	1.0 g/ml
Boiling Point		≥200 °C [≥392 °F]
Aq. Solubility		Miscible
Solids Content (w/w)		50%

Compatibility

The 862 mask is compatible with most materials found on printed circuit assemblies; however, in an uncured state it is not compatible with contaminants like oil, and greasy flux residues. MG Chemicals recommends cleaning the printed circuit assembly with a suitable electronic cleaner before applying the 862 mask or other coatings.

The chosen electronic cleaner should remove moisture, wax, greases, oils, and all other contaminants. (See recommended cleaners on page 4.)

Health, Safety, and Environmental Awareness

Please see the 862-Liquid **Material Safety Data Sheet** (MSDS) for more details on transportation, storage, handling and other security guidelines.

Environmental Impact: The volatile organic content is 50%.

RoHS COMPLIANT

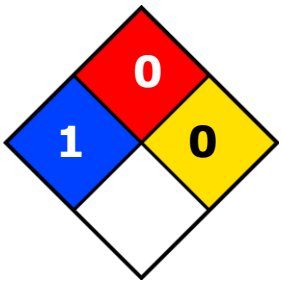
This product meets the European Directive 2011/65/EU Annex II (ROHS); recasting 2002/95/EC.

Health and Safety: The mixture may cause skin irritation skin or skin allergies. Most components are not classified as hazardous.

HMIS® RATING

HEALTH:	* 1
FLAMMABILITY:	0
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	

NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:
0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

Wear safety glasses and disposable gloves. Wash hands thoroughly after use.

The cured coating presents no known hazard.

Application Instructions

Squeeze a desired quantity on board. Use squeegee or template, if available, to get better control of coverage. If the product is too thick, thin it with deionized (D.I.) water.

To cure at Room temperature

- Let air dry 1 hour

To accelerate cure by heat

- Put in oven or under heat lamp at 65 °C [149 °F] for 30 minutes.
- Put in oven or under heat lamp at 80 °C [176 °F] for 20 minutes.

NOTE: Coats that are very thick require more time to dry.

Packaging and Supporting Products

Cat. No.	Form	Net Volume		Net Weight		Shipping Weight	
862-250ML	Tube	250 mL	8.5 fl oz.	0.25 kg	0.55 lb	0.25 kg [a)]	0.55 lb [a)]

a) Pack of 10 cans

Electronic Cleaners

- Cat. No. 4050A-340G, 4050-1L, 4050-4L, 4050-20L Safety Wash Electronics Cleaner
- Cat. No. 406B-450G Superwash Cleaner Degreaser
- Cat. No. 824 Isopropyl Alcohol

Technical Support

Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

Email: support@mgchemicals.com

Phone: 1-800-340-0772 Ext. 1030 (Canada, Mexico & USA)
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Warranty

M.G. Chemicals Ltd. warranties this product for 12 months from the date of purchase by the end user. *M.G. Chemicals Ltd.* makes no claims as to shelf life of this product for the warranty. The liability of *M.G. Chemicals Ltd.* whether based on its warranty, contracts, or otherwise shall in no case include incidental or consequential damage.

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