

CS 3104M Low Adhesion Potting Compound

Chem Seal

Technical Bulletin
November 2010

PRODUCT DESCRIPTION

CS 3104 M will protect electrical connections from corrosion by atmospheric moisture. Its low adhesive strength makes it possible to remove the encapsulating material from the connections. No special preparation is required to obtain a bond to the remaining cured material during re-encapsulation.

CS3104M is a soft, low adhesion potting compound for electrical components. CS 3104 M is easily removed for access to the encapsulated components, and easily repaired. CS 3104 M is a two-part polysulfide based compound.

SURFACE PREPARATION

To obtain good adhesion, the surfaces must be free of all traces of oil, wax, grease, dirt, loose coating or other contamination. Working in small area segments, wipe the inner surface of the connector and the wires with IPA will be sufficient. adhesion to some insulations may require the use of a primer.

MIXING INSTRUCTIONS

Parts A and B are matched at the time of manufacture to provide optimum performance when cured. Assure that Parts A and B are combined at the recommended ratio printed on the container label. Do not thin CS3104M prior to combining Parts A and B. Before combining parts A and B stir the Part B component until the contents of the container are uniform. Place all of the B component into the Part A container and continue stirring until a uniform gray color is achieved. There should be no white or black streaks in the properly blended material. Periodically scrape the sides and bottom of the container as well as the mixing tool to assure proper mixing. When using a mechanical mixer, avoid high speeds since the heat generated will reduce the application time of the mixed CS3104M. Violent stirring will also entrap air in the cured sealant. Mixing instructions for plastic injection kits are provided on the packaging. When mixing materials packaged in bulk or when only a small quantity is required, stir 10 parts by weight of the Part B component into 100 parts by weight of the Part A component. Be sure to stir the Part B prior to weighing out the required amount.

APPLICATION

CS 3104M is a pourable compound and may be either poured or pumped and allowed to level by itself. As satisfactory performance depends on continuous contact between the compound and the surfaces of the component, every effort should be made to prevent or eliminate gaps, bubbles, or other voids. Consequently, whenever possible, components should be filled in a continuous operation avoid layering of the compound.

Physical and Application Properties are Typical

Application		Properties	
Viscosity:			
Base Compound		500 poises	
Cure Time		36 hours	
Gel Time		5 hours	
Consistency:			
Curing Agent		Heavy Paste	
Mixed System		Pourable	
Mixing Ratio (by Weight)		100:10	
Work Life		2 hours	
Color:			
Base Compound		White	
Curing Agent		Black	
Specific Gravity		Part A	1.8
		Part B	1.7
Physical		Properties	
Hardness, Shore A		4	
Tensile Strength		18 psi	
Solids Content		98%	
Adhesive Strength			
(180° peel from bare Aluminum)		Less than 1 lb/100%	Cohesive Failure
Corrosion Resistance			
(72 hour immersion in 3% Salt solution at 120°F)		No visible corrosion of	substrate
Volume Resistivity		2 x 10 ¹²	OHMS-CM
Surface Resistivity		3 x 10 ¹²	OHMS

Chem Seal Products

Manufactured By The Flamemaster Corporation
13576 Desmond Street, Pacoima, CA 91331-2315
Phone 818) 890-1401 *** Fax (818) 890-6001 www.flamemaster.com

1 of 2

Supersedes January, 2002

CS 3104M Low Adhesion Potting Compound

Chem Seal

Technical Bulletin
November 2010

CURE

Specified application and cure schedules are based on standard conditions of 77°F and 50% relative humidity. Increased temperature and relative humidity will reduce the work life and speed up the cure while reduced temperatures and relative humidity will extend the work life and slow the cure.

STORAGE LIFE

The storage life of CS3104M is nine months when stored in the original unopened containers at temperatures below 80°F. Some change in work life, viscosity and curing rate may occur during this period. However, such changes are slight and in no way affect the end performance of the product. Should a skin appear on the base compound simply remove it and use the remainder.

CLEAN-UP REMOVAL OF CURED MATERIAL

For clean-up as well as removing fresh CS 3104M, you may use IPA, aromatic solvents CS9900 cleaner. For removal of cured CS3104M material commercial polysulfide / epoxy strippers are recommended.

SAFETY

Read and understand the Material Safety Data Sheet (MSDS) associated with this material.

**Emergency Contact Chemtrec 800-424-9300
Outside North America 703-527-3887**

**Keep out of the reach of children
For industrial use only**

PACKAGING AVAILABILITY

Two component plastic cartridges

Pre measured can kits ½ Pint – 1 Gallon

Bulk 5 Gallon pails and 50 Gallon drums

Pre-mixed and frozen cartridges

Contact Flamemaster for specialized packaging

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. Flamemaster does not warranty the performance of fuel tank sealants or coatings when subjected to fluids or fuels other than those specified by the applicable specification. User shall rely on his own information and tests to determine suitability of the product for the intended use and user assumes all risk and liability resulting from his use of the product. Sellers and manufacturers sole responsibility shall be to replace that portion of the product of this manufacturer, which proves to be defective. Neither seller nor manufacturer shall be liable to buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.