

# CS 3105 Sealing Compound

Chem Seal

Technical Bulletin

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## PRODUCT DESCRIPTION Junction Box Sealer

CS 3105 is a thixotropic type, adhesive sealing compound suitable for use in edge seal encapsulation.

CS 3105 is a two-part, polysulfide base compound that cures at room temperature to a flexible, resilient rubber with excellent adhesion to plastics and metals. Mixed CS 3105 is a thixotropic paste which is easily applied with an extrusion gun or spatula. The cured sealant is resistant to aircraft lubricants, oils, water and weather. The material remains flexible at low temperatures.

## SURFACE PREPARATION

To obtain good adhesion, remove all traces of oil, wax, grease, dirt, or other contamination. This is done by wiping with a clean oil free solvent. Clean only small areas at one time and wipe dry with a clean cloth before the solvent evaporates. Maintain a clean solvent supply.

## MIXING INSTRUCTIONS

When mixing pre-packaged kits, the entire contents of base compound (Part A) and curing agent (Part B) should be used. For small quantities, mix 100 parts by weight of Part A to 10 parts by weight of Part B. Part A and Part B are carefully matched in production for optimum performance characteristics. Care should be taken to assure that the Part B packaged with a given Part A isn't separated and used with a different Part A.

## APPLICATION

CS 3105 may be applied with a pressure gun or a spatula within the specified application life. Specified application lives are based on the standard conditions of 77 deg. F and 50% relative humidity. For every 10 deg. F rise, the application life is reduced by one half; for every 10 deg. F drop, it is doubled.

## CURE

The cure period is dependent on the application life, temperature, and relative humidity. Increased temperature and increased relative humidity will speed cure. Reduced temperature and reduced relative humidity will slow cure. Cure may be accelerated by heating up to 120 deg. F.

### Color

Base Compound      Black  
Curing Agent        Red-Brown

Non-Volatile Content Min. 96%

### Viscosity:

# 7 spindle @ 4 RPM  
mixed: > 1200 poises

### Mixing Ratio:

By Weight            100:10  
By Volume            100:6.5

Vertical Flow            0.5 inches

Application Life\*        1 Hours

Tack Free Time\*        10 Hours

Time to 30 REX        24 Hours

\* At 77 deg. F and 50% Relative Humidity

Typical application time.

Water Vapor Permeability .005 gms/Hour

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## STORAGE LIFE

The storage life of CS 3105 is 9 months when purchased in cans and stored at temperatures below 80 deg. F in the original unopened containers. Shelf life when purchased in cartridge is 12 months, also with the recommended storage below 80 deg. F. Some change in application life, viscosity, and curing rate may occur during this period. However, such changes are slight and in no way effect the end performance of the product.

## CLEANING OF EQUIPMENT

Tools and equipment may be cleaned prior to cure by use of solvent. Cured sealant may be removed from equipment by soaking and scrubbing with polysulfide/epoxy stripper.

## SAFETY

CS 3105 has not been found to have any toxic effect in normal usage. However, because some individuals may be sensitive to chemicals used in the manufacturing of the curing agent, excessive contact should be avoided. The curing agent contains a lead compound, refer to the applicable Material Safety Data Sheet prior to use of this product.

**PACKAGING** CS 3105 is packaged in the following kit sizes:

- 24 ea. per case 2 1/2 oz. and 6 oz. cartridges
- 16 ea. per case Pint Kit
- 16 ea. per case Quart Kit
- 4 ea. per case Gallon Kit

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. 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. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer that proves to be defective. Neither seller nor manufacturer shall be liable to buyer or any third person for any injury, loss, 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.

Color Black

Low Temperature

Flexibility -65°F

Fungus Resistance Non-nutrient

Corrosion Resistance Excellent

Resistance to Hydrocarbons  
(Mil-S-3136 Type III Fuel) Excellent

Fluid Resistance Excellent  
resistance to water, alcohol, petroleum and synthetic  
lubricating oils and petroleum based hydraulic oils.

Radiation Resistance (Gamma)  $3 \times 10^7$  Roentgens -  
less than 25% change in tensile strength and elongation  
Adhesion to Aluminum 20 lbs/inch

Adhesion to other materials - Adheres to stainless steel,  
mild steel, magnesium, tin, copper, glass, polyester  
resin, nylon, zinc chromate primer, epoxy primers, and  
enamel

Repairability - Fresh sealant bonds to cured sealant to  
form an inseparable bond.