CS 5500 CI Class B Corrosion Inhibitive Sealant

Chem Seal

Technical Bulletin
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High Temperature Corrosion Inhibitive Sealant

PRODUCT DESCRIPTION tested to STM 40-111, STM 40-112 (Faying Surface)
FMS 3055F-1, AMS 3265 (Fillet Seal)

CS 5500 CI can be used in applications where corrosion inhibition is required and service temperatures of up to 360°F are encountered

CS 5500 CI is a two part, corrosion inhibiting, high temperature resistant fuel tank and fuselage sealant based on Permapol P-5 polymers, an improved chemical modification of Thiokol LP* polymers. Permapol P-5 polymers are covered under U.S. Patent 4,623,711. When cured, CS 5500 CI is a flexible, resilient rubber which has excellent adhesion to aluminum, magnesium, titanium, steel and other materials.

Color	
Base Compound	Gray
Curing Agent	Black
Viscosity	
Fillet Sealing	6,000-16,000 poises
Base Compound	12,000 poises
Curing Agent	1,000 poises
Mixing Ratio	
By Weight	100:17
By Volume	100:14
Vertical Flow	0.3 inch
Fillet-	
Application Life	1/2, 2 or 6 hours
Tack Free	20 hours
Hardness at 72 hrs	45 shore A
Non Volatile	97 %
Faying -	
Application	8 hours (B-48)
Assembly Time	168 hours

SURFACE PREPARATION

To obtain good adhesion, all traces of oil, wax, grease, dirt or other contamination must be removed. Wiping with a clean oil free solvent (Mil-C-38736 or MEK/Toluene) and cleaning a small area at a time and wiping the cleaned area with a clean rag before the solvent evaporates is usually sufficient. Maintain a clean solvent supply by pouring the solvent on the washing cloth. CS 5500 CI will adhere to most substrates, providing the area to be sealed is clean and dry.

*LP - is a trade name of Morton International

MIXING INSTRUCTIONS

Do not thin CS 5500 CI with solvents when mixing pre-measured kits. The entire amount of the Part A and Part B should be used. Thoroughly mix Part B in its container until a smooth paste is obtained. For mixing bulk materials, or small quantities, stir into 100 parts of Part A, 17 parts of Part B, by weight. Mix thoroughly for seven to ten minutes to obtain an even, uniform gray color with no streaks. Scrape the sides and bottom of the mixing container and also scrape down the mixing tool several times to insure proper mixing. When using a mechanical mixer, use low speeds since a high speed mixer will generate internal heat thereby reducing the application life. Violent stirring also entraps air in the mixed CS 5500 CI.

APPLICATION INSTRUCTIONS

CS 5500 CI Class B may be applied with a pressure gun or spatula.

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STORAGE LIFE

The storage life of CS 5500 CI is one year minimum when stored at temperatures below 80°F in the original unopened containers. Some change in application 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.

CLEANING OF EQUIPMENT

For clean up prior to use, and also to remove partially cured CS 5500 CI use MEK/Toluene cleaner. Cured CS 5500 CI will require a soaking period in epoxy polysulfide stripper.

SAFETY

The uncured combined components may produce irritation following the contact with the skin. When handling CS 5500 CI avoid ingestion and all contact with the body especially open breaks in the skin. Always wash hands before eating or smoking. Obtain medical attention in case of extreme exposure or ingestion. For additional information see the Material Safety Data Sheet.

Color:		Dark Gray
Specific Gravity:		
Base Compound		1.56
Curing Agent		1.85
Mixed		1.60
Hardness, Ultimate		50 REX
	Tensile	Elongation
Standard Cure	400 psi	400%
Standard Heat Cycle	500 psi	170%
JRF Immersion		
7 days 140 deg.F	350 psi	250%
8 hrs. @ 360 deg. F	230 psi	100%
T-Peel	30 PIW	
Peel Strength	**PIW**	**%CF**
Standard Cure	50	100
JRF Immersion		
7 days @ 140 deg. F	45	100
Standard Heat Cycle	40	100
Corrosion Resistance	Passes	
Low Temperature		
Flexibility	Passes	
Thermal Rupture	<0.0 inch @ 360 deg. F	
Hydrolytic Stability	45 Shore "A"	
Repairability	Excellent (40 PLI/100% C.F.)	

PACKAGING

CS 5500 CI 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

CS 5500 CI is also available in 5-Gallon and 50 Gallon Drum Kits.

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