

# CS 5530 High Temperature Low Density Sealant

## Chem Seal

*Technical Bulletin*  
January 2002

**PRODUCT DESCRIPTION** meets AMS 3281

CS 5530 can be used in applications where temperatures of up to 360 deg. F are encountered.

CS 5530 is a two part, 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 5530 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:	
Base Compound	9,000 poises
Curing Agent	1,000 poises
Mixing Ratio by Weight	100:10
Mixing Ratio by Volume	100:6.3
Vertical Flow	0.3 inch
Application Life	2 hours
Tack Free	20 hours
Hardness at 72 Hours	45 shore A
Non-Volatile	98%

### **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 5530 will adhere to most substrates, providing the area to be sealed is clean and dry.

\*LP - is a trade name of Morton Thiokol

### **MIXING INSTRUCTIONS**

Do not thin CS 5530 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 10 part of Part B, by weight. Mix thoroughly for seven to ten minutes to obtain an even, streakless, uniform gray color. 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 5530.

### **APPLICATION**

CS 5530 Class B may be applied with a pressure gun or spatula.

### **STORAGE LIFE**

The storage life of CS 5530 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.

# CS 5530 High Temperature Low Density Sealant

## CLEANING OF EQUIPMENT

For clean up during use, and also to remove partially cured CS 5530 use CS 9900 cleaner. Cured CS 5530 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 5530 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.

## PACKAGING

CS 5530 is packaged in the following kit sizes:

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

CS 5530 is also available in 5-Gallon and 50 Gallon Drum Kits.

MANUFACTURED UNDER LICENSE TO PRODUCTS RESEARCH AND CHEMICAL CORPORATION.

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 test 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, which proves to be defective. Neither seller nor manufacturer shall be liable to the 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.

Color	Gray
Specific Gravity:	
Base Compound	1.25
Curing Agent	1.92
Mixed	1.30
Hardness, Ultimate	60 REX

Standard Cure	7 days	14 days	
	@250°F	JRF/140°F	
Tensile			
Strength	350 psi	460 psi	240 psi
Elongation	220 %	140 %	250 %
Peel Strength	14 days @ 77°F; 40 PLI		
	30 days Immersion @ 140°F/30 PLI		
	7 days @ 250°F 30 PLI		
Corrosion Resistance	Passes		
Low Temperature			
Flexibility	Passes		
Thermal Rupture	0.0 inch @ 300°F		
Hydrolytic Stability	50 Shore "A"		
Repairability	Excellent		
	(40 PLI/100% C.F.)		