

CS 3209 Electrically Conductive Class B

Chem Seal

Technical Bulletin
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PRODUCT DESCRIPTION meets Mil-S-8802F, Type II; STM 40-109 Rev. C

CS 3209 is an electrically conductive fuel resistant sealant for use on integral fuel tanks and pressurized cabins as well as other areas subject to contact with aircraft fuels, lubricants, oils, water and/or weathering. CS 3209 is a two-part polysulfide base compound which cures at room temperature to a flexible, resilient rubber with excellent adhesion to aluminum, magnesium, titanium, steel, and numerous other materials. CS 3209 will withstand the attack of sulfur compounds that are present in jet fuels.

SURFACE PREPERATION

To obtain good adhesion, the surfaces must be free of all traces of oil, wax, grease, dirt or other contamination. Working in small area segments, wipe the surface using a clean rag doused in an oil free solvent. Before the solvent evaporates, wipe the surface dry with a second clean rag. Maintain a clean

solvent supply by pouring the solvent on the washing cloth. CS 3209 will adhere tenaciously to most substrates providing the surface to be sealed is clean and sound.

MIXING INSTRUCTIONS

CS 3209 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 as recommended on the container label.

When mixing pre-measured, kits do not thin CS 3209 with solvents. Before combining with the Part A component, stir the Part B component until the contents of the container are uniform. Place the entire B component into the Part A container and continue stirring until a uniform gray color. 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 CS 3209. Violent stirring will also entrap air in the cured sealant.

Color	
Base compound	Off white
Curing agent	Black
Mixed compound	Gray
Mixing ratio	
Weight	100:10
volume	100:8.3
Non volatile content	96%
Viscosity	
Base compound	
Brookfield RVF-Spindle # 7 at 2 RPM	11,000 poises
Curing agent Brookfield RVF-Spindle # 7 at 10 RPM	1000 poises
Vertical flow	0.30
Hardness, Shore A	50
Electrical Resistance	Less than 0.002 OHM/in ²

Performance Properties - are Typical

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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 before weighing out the required amount.

APPLICATION

The work life of CS 3209 is indicated by the number following the class designation and varies from 1/2 hour to 4 hours. Work life is the minimum amount of time the material will maintain its application properties.

Work life	Application Time	Tack Free	Curing rate to 35 A
B 1/2	1/2 hour	8 hours	30 hours
B 2	2 hour	24 hours	72 hours
B 4	4 hour	36 hours	90 hours

CURE

Specified application and cure schedules at 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. Heating up to 140°F may accelerate cure.

STORAGE LIFE

The storage life of CS 3209 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.

CLEAN UP

For removing fresh or cured CS 3209, an equal volume blend of MEK/Toluene solvents can be used. Cured CS 3209 will require a soaking period in epoxy; Polyurethane stripper for satisfactory removal.

SAFETY

The uncured components may produce irritation following the contact with the skin. When handling CS 3209 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 cases of extreme exposure or ingestion. For additional information, see the Material Safety Data Sheet.

"Flamemaster supplied aviation fuel tank Sealants and coating materials are tested for compatibility with reference fluids and fuels as specified by the applicable specification. Flamemaster does not warranty the performance of fuel tank Sealants and coatings subjected to fluids or fuels other than those specified by the applicable specification.

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"It is the responsibility of the user to determine the suitability for use utilizing the information contained in the applicable specification.

PACKAGING

CS 3209 is packaged in the following kit sizes:

12 ea. per case Pint Kits

12 ea. per case Quart Kits

4 ea. per case Gallon Kits

CS 3209 is also available in 5-Gallon Kits and 50 Gallon Drum Kits.

Refer to the applicable Material Safety Data Sheet before using this product.

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 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.