



Sealants & Protective Coatings

*A premier specialty chemical manufacturer
since 1942*

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FLAMEMASTER has operated continuously for over eighty years. Through its innovation and dedication to problem-solving, FLAMEMASTER has become one of the main suppliers of aircraft sealants for major airplane manufacturers and MRO markets, in both the military and commercial spaces. We have **ISO 9001:2015 and AS9100D certification** and have held a **Nadcap (Sealants) accreditation** since the inception of the program.

FLAMEMASTER **has formulating and compounding capabilities for sealants, adhesives, and coatings** made from polysulfides, epoxies, silicones, and rubbers, among others. The product line includes corrosion-resistant materials, mid- and lightweight sealants, electrical potting compounds, and thermal barriers.



FLAMEMASTER operates in its 54,000+ square foot facility in Pacoima. It was one of the first in the area to be solar-powered. Our decision to go "green" has enhanced the work environment and encourages employees and affiliates to do the same.

FLAMEMASTER joined SOCOMORE in 2023. Our company benefits from Socomore's global presence, expertise in aerospace materials, and strong customer relationships to introduce our products in new markets, to strengthen our sales, and fully utilize our production capabilities. It also gives Flamemaster access to additional R&D resources to help stay ahead of the ever-changing sealant market. This partnership marks an important milestone for the company, providing a large platform to continue our growth and create innovative solutions for the aerospace sealant market. We are in a strong position to support the specific needs of aircraft manufacturers worldwide.

We supply...

AIRBUS
AIRBUS HELICOPTERS
BELL
BOEING
BOMBARDIER
CESSNA
GE
LOCKHEED MARTIN
PRATT&WHITNEY
SAFRAN
US AIR FORCE
US NAVY

... and more

● Aerospace Sealants

	Specifications*	Color	Description and use
CS 135 <i>COMING SOON!</i>	AMS-S-8802 AMS 3276 FMS 1044 FMS 3044	Gray	Midweight Fuel Tank Sealant – This fast-curing, medium density (1.4 spg, max) MnO ₂ -cured polysulfide sealant is also able to withstand higher temperatures than standard AMS-S-8802 sealants (excursions to 360 °F). Used for sealing fuel tanks as well as the aircraft fuselage.
CS 143 <i>COMING SOON!</i>	AMS 3265 MIL-PRF-81733 FMS 3104	Gray	Non-chromate Corrosion Inhibitive Sealant – This fast-curing, medium density (approximately 1.45 spg) MnO ₂ -cured polysulfide contains an effective, non-chromate corrosion inhibitor package. Used for sealing and coating metal components on weapons and aircraft systems for protection against corrosion.
CS 1900	MIL-S-38249 Type I	Black	Firewall Sealant – An elastomeric epoxy/amine material used for sealing firewall structures with a service operating temperature range of -65 °F to +400 °F with flash temperatures to 2,000 °F.
CS 2415	DMS 1819 C MIL-S-38228, Type 1-1/2 STM 40-006	Aluminum	Aluminum Exterior Sealant – An aluminum-containing, MnO ₂ -cured polysulfide fuselage sealant, used for sealing external seams, depressions, and gaps on aircraft for weather-tightness and aerodynamic smoothness. Withstands jet fuels and weathering.
CS 2725	MIL-PRF-24176, Types I and II	Gray	Epoxy Bonding Compound – With high adhesion to many construction materials, this product is used for repairing spalled and cracked areas in concrete, plaster, stucco, stone, slate, wood, and tile. Can also be used as a mortar for ceramic tile, stone work, block, and brick.
CS 2727	Flamemaster specification (USAF Ballistic Missile Div. approval)	Off-white	Flexible Epoxy Joint Sealer – This flexible epoxy/amine joint sealer has excellent adhesion to concrete, wood, and other materials without primer. Useful for sealing concrete joints located in liquid oxygen (LOX) spillage areas, it also has excellent resistance to water, fuels, many chemicals, and extreme weathering.
CS 3100	MIL-PRF-8516G – Types I and II, Classes 1, 2 and 3	Tan	Potting and Sealing Compound – This lead dioxide-cured polysulfide material protects electrical connectors and components from moisture, fuels, and dirt. Has excellent volume and surface resistivities.



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CS 3104M	Flamemaster specification (modified MIL-PRF-8516G)	Black	Low Adhesion Potting Compound - Similar to CS 3100 but designed for low adhesion to allow removal of the encapsulating material from electrical connections.
CS 3105	Flamemaster specification	Tan	Junction Box Sealer - This modified potting compound is a thixotropic, lead dioxide-cured polysulfide sealant suitable for use in edge seal encapsulation. Easily applied with an extrusion gun or spatula.
CS 3201	AMS 7124 A-1/2, A-2 B-1/2, B-2	Black or Tan	Sealing Compound for Aircraft Structures – This lead dioxide-cured polysulfide compound has excellent adhesion to metals. Used to seal aircraft structures against the passage of air, liquids, and vapors.
CS 3202	A-A-59293 (formerly MIL-S-11031)	Black	Optical Sealing Compound – A lead dioxide-cured polysulfide material used for bonding glass (or metal) to metal in optical instruments or fire control instruments. The standard application time is about 3 hours ; materials with shorter application times are available.
CS 3204	AMS-S-8802 Type 2 STM40-112, 299- 947-107 et al. Classes A, B, and C A-1/4 – A-2; B-1/4 – B-4; C-8 – C20	Gray	Integral Fuel Tank Sealant – An industry standard, this MnO ₂ -cured polysulfide sealant is used for sealing and repairing integral fuel tanks, cabin pressure sealing, and aerodynamic smoothing, faying surface sealing, wet installation of fasteners, and other uses. Service temperature is -65 °F to +250 °F.
CS 3204R	AMS-S-8802 Type 2 Class A-1/2, B-1/2, B-2	Gray	Integral Fuel Tank Sealant – A faster curing version of CS 3204 ; physical properties are the same.
CS 3204 WT20	MIS-31868C STM40-112	Aluminum	Weld Through Sealant – A modified CS 3204 material. Conductive and fuel-resistant, this faying surface sealant is used for metal parts joined by spot welding.
CS 3205	AMS-S-8802 Type 1 Class B-1/2, B-2	Gray	Integral Fuel Tank Sealant – As an AMS-S-8802 Type 1 sealant, this dichromate-cured polysulfide sealant is used for the same applications as CS 3204. However, the dichromate cure is not sensitive to humidity so is often a choice in dry or desert climates.
CS 3206	AMS-S-83318 Class B-1/6	Gray	Quick Repair Fuel Tank Sealant – This MnO ₂ -cured polysulfide sealant is typically used for quick repair of integral fuel tanks and fuel cell cavities. With a relatively short application time, it will cure as low as 20 °F.
CS 3209	STM 40-109 B-1/2 and B-2	Gray	Electrically Conductive Sealant – Designed to conduct static electricity, this MnO ₂ -cured polysulfide material is used as a faying surface sealant. Also meets acceptance requirements of AMS-S-8802.
CS 3210	STM 40-107 B-1/4, B-1/2, B-2	Gray	Low Density Pressurized Cabin Sealant – A low specific gravity (1.0) MnO ₂ -cured polysulfide void filler ; use of this material can result in substantial weight savings over conventional sealant.

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CS 3213	MIL-PRF-81733 Class 1 STM 40-111F STM 40-112M A, B, and C materials ; application times from ½ to 96 hours	Gray	Corrosion Inhibitive Sealant – A chromate-containing, MnO ₂ -cured polysulfide used for sealing and coating metal components on weapons and aircraft systems for protection against corrosion. Service temperature is -65 °F to +250 °F.
CS 3247	Flamemaster Specification (based on AMS 3333) Class B-1/2, B-2, B-4	Black	Aircraft Windshield Sealant - This MnO ₂ -cured polysulfide material is used for setting or repairing windshields and transparencies made of glass, acrylic, or polycarbonate in composite or metal frames.
CS 3330	AMS 3284 Type I Class A-1/2, A-2 Class B-1/2, B-2	Red	Access Door Sealant – Type 1 low adhesion sealants do not contain corrosion inhibitors. This MnO ₂ -cured polysulfide material can be used as a strippable fillet for integral fuel tanks and pressurized cabins as well as a gasket for removable parts.
CS 3330 CI	AMS 3284 Type II Class A-1/2, A-2 Class B-1/2, B-2	Purple	Corrosion Inhibitive Access Door Sealant – Similar to CS 3330, but also contains a non-chromate corrosion inhibitor (NCCI). Also used as an access door sealant for integral fuel tanks and pressurized cabins, as a strippable fillet, and as a gasket for removable parts.
CS 3600	AMS-S-4383	Red	Sealing Compound, Topcoat, Fuel Tank, Buna N Type – This rubber-based, one component, air-drying material is designed as a topcoat or barrier coating for integral fuel tank sealants and coatings. May be used for temporary repair of aircraft fuel tanks using a fill-and-drain technique or as a bonding agent for synthetic rubber, metals, etc. Resistant to exposure from jet fuel or avgas, but not suitable for use with motor fuels containing alcohols.



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	Specifications*	Color	Description and use
CS 3802	SPC-34076 Class 2-1/2, 2-2 TS10425, Class 2, 3, and 4	Brick Red	Room Temperature Silicone – This thixotropic RTV silicone sealant is a room temperature, chemically curing material useful as an insulating coating and thermal barrier to retard heat transfer.
CS 3808	Boeing BMS 8-68, Class A-2	Brick Red	Room Temperature Silicone – This silicone-based material Class A material is similar to CS 3802, also offering excellent high temperature performance, good stability, and easy application. Used for aircraft, missile, and electronic applications.
CS 4406	STM40-106 Class B-1/2 and B-2	Gray	Hole-filling Compound – This MnO ₂ -cured polysulfide sealant was designed to plug through holes in airframe structure to maintain the pressure boundary. Excellent adhesion to aluminum, magnesium, titanium, steel, and other materials.
CS 5500 N	AMS 3276 Class B-1/2, B-2, B-4, B-6	Gray	High Temperature Fuel Tank Sealant – A MnO ₂ -cured polysulfide sealant able to withstand higher temperatures than the standard AMS-S-8802 sealants (excursions to 360°F). Used for sealing fuel tanks as well as the aircraft fuselage.

Product Packaging

FLAMEMASTER products are available in the following sizes, with some exceptions:

- 2.0 oz and 3.5 oz injection kits
- ½ pint, pint, quart, and gallon can kits
- 5-gallon pail kits
- 55-gallon drum kits



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● Ablative, heat resistant and fire protective coatings

	Specifications*	Color	Description and use
CS 7707	DPM 2389-2	Clear Aluminum	Nylon Epoxy Coating – This two-part material cures at room temperature to a flexible film with excellent adhesion to a variety of substrates. Used as a coating on flexible, semi-rigid and rigid substrates for protection against Skydrol®, hydraulic fluids, fuels, oils, salt water and ozone.
CS 9903	MIL-P-47215 MMS-K328	Pink	Primer - Used for bonding room temperature vulcanizing silicones such as CS 3802, CS 3808, and CS 3810 to various substrates. Also, used to prime other rigid surfaces such as glass, epoxy, and polyester.
CS 9960	Flamemaster Specification	Clear	Primer - Plastics – This adhesion promoter is used to enhance the coupling characteristics of polysulfide compounds, including potting compounds, to various substrates. Also used to prime windshield surfaces prior to sealant application.
E-340 AF	MIL-C-47244 MIS 36199, Navord 2180981	Deck Gray Forest Green (others upon request)	Blast Resistant Ablative Coating – A silicone-modified epoxy, this coating is a room temperature curing, high temperature resistant ablative coating. License required for export.
DE 350	SP 677D, Base Coat SP678, Topcoat, White	Amber White	Ablative Base Coat / Protective Topcoat – This room temperature curing, three-part, silicone-modified epoxy ablative coating was designed to protect metallic and reinforced plastic surfaces from the thermal effects of supersonic atmospheric exit and re-entry conditions. License required for export.
DE 370 AF	MIL-C-47244 MIS 36199, Navord 2180981	Grey	Light-weight Ablative Coating – This light-weight, rigid, epoxy-based compound was designed to provide ablative protection to missile components subjected to atmospheric aerodynamic heating. License required for export.
E-400 Base	AS 1129	Off-white	Ablative Insulative Coating – The E-400 System consists of an insulative base coat and a weather barrier topcoat. The base coat is a two-component epoxy compound designed to provide maximum insulation prior to ablation. License required for export.
E-400 Topcoat	AS 1129	Haze Gray White (others upon request)	Tough Epoxy Coating – Used with the E-400 base coat, this epoxy coating withstands the abrasive effect of sand and erosion on aircraft surfaces and is resistant to a variety of fluids. License required for export.
E-400P	Flamemaster Specification	Off-white	Moldable Putty – This low density, epoxy/polyamide compound can be molded in sheets or used as an encapsulant or adhesive. Used to repair surfaces previously coated with sprayable E-400 thermal insulating system. License required for export.

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	Specifications*	Color	Description and use
E-943	MIL-C-47244 MIS 43908 MIS 36199	Forest Green (others upon request)	Carbon Fiber Free Ablative Coating – A rigid, two-component epoxy-based material that protects against extreme heat and high erosion in solid propellant missile launchings. Designed for trowel or molding applications. License required for export.
F-100E	MIL-C-47244 MIS 31865	Deck Gray (others upon request)	High Temperature Ablative Coating - Resistant to extreme heat and high erosion such as experienced in solid propellant missile launchings, this rigid, two-component epoxy-based coating is also designed for trowel or molding applications. License required for export.
Flamemastic 77	Flamemaster Specification FM 3971	Off-white	Electrical Cable Coating – Compounded from water-based thermoplastic resins, flame-retardant chemicals, and inorganic, noncombustible fibers, this coating protects electrical cables from fire and prevents propagation of fire on grouped electrical cables.
PA-2	MMS K 364	Clear	Primer Activator – Most commonly used to decrease cure time of silicone coatings, such as S-885, this solvent-based material contains catalyst and a silicate.
S-885	STM K799 2-hour pot life	White	Silicone Thermal Insulating Ablative Coating – This two-component, room temperature curing, low density silicone serves as a thermal insulating ablative coating. Applied by trowel or spray, this coating provides thermal protection for launch vehicles, payload shrouds, and control surfaces.
S-886	STM K798 4-hour pot life	Mauve to Beige	Silicone Thermal Barrier Coating – Similar to S-885, this silicone coating is less rigid and offers a longer pot life. It is used on exposed areas for protection from ascent heating as well as rocket plume impingement to exposed surfaces on launch vehicles.
S-1023	STM K797	White	Silicone Coating – This sprayable, high temperature resistant, room temperature curing silicone coating can be used as an external coating on launch vehicles and payload shrouds.
V-455	4ODS-30302	White	Vinyl Protective Coating – With one-coat application on steel and aluminum, this thixotropic vinyl coating provides excellent chemical resistance. License required for export.

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