

TECHNICAL DATA

CA 1000V Non-Chromate Corrosion Inhibitive Jointing Compound

Description

CA 1000V is a non-curing, non-chromate corrosion inhibitive compound. It has a service temperature range from -65°F (-54°C) to 240°F (116°C), with intermittent excursions up to 275°F (135°C). This material acts as an effective barrier against the common causes of corrosion on aluminum alloys or between dissimilar metals. The compound remains permanently mastic after prolonged exposure to aircraft fuels, both jet fuel and aviation gas.

CA 1000V is a one-part, epoxy capped, Permapol® polysulfide compound. The material is a thixotropic paste suitable for application by brush or spatula.

CA1000V is violet tinted version of CA1000 to enable easy differentiation to white greases/lubricants currently in use by major OEMs

The following tests are in accordance with PRC-DeSoto standard and AIMS 04-05-005 specifications.

Application Properties (Typical)

Colour	violet
Appearance	Uniform composition, no lumps or separated material
Viscosity (Brookfield #7 @ 2 rpm), Poise (Pa-s)	950 (95)
Squeeze test, inches (mm)	7.1 (180)

Performance Properties (Typical)

Specific gravity	1.34
Nonvolatile content, %	88
Pigment contents, %	15
Fineness of grind, Hegman	≤5
Flash point °F (°C), [Closed cup (SETA)]	85°F (29°C)
Solubility in water @ 73°F (23°C)	None
Exposure to heat @ 104°F (40°C), 95% R.H. for 1000 hours	Aluminum/Stainless steel - Easy removal, no corrosion Graphite/Aluminum - Easy removal, no corrosion
Exposure to dry heat @ 239°F (115°C) for 1000 hours	Easy removal, compound still tacky
High temperature flow 20 mils, 24 hours @ 158°F (70°C)	
Dry	No flow
Immersion in 3.0% NaCl-H ₂ O	No flow
Immersion in AMS 2629 JRF	No flow
Fuel resistance (10 mils), % weight gain, 7 days @ 120°F (49°C)	
Immersion in AMS 3629 JRF	1.80
Immersion in MIL-H-5606 (Hydraulic fluid)	0.50
Immersion in De-icing fluid	1.20
Immersion in 3.0% NaCl-H ₂ O	0.45

Corrosion test by galvanic cell method

Aluminum/Titanium couple, 2 weeks - No signs of corrosion or sealant deterioration.

Aluminum/Stainless steel couple, 2 weeks - No signs of corrosion or sealant deterioration.

Aluminum/Cadmium plate steel couple, 2 weeks - No signs of corrosion or sealant deterioration.

Note: The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

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Surface Preparation

Immediately before applying sealant to primed substrates, the surfaces should be cleaned with solvents. Contaminants such as dirt, grease, and/or processing lubricants must be removed prior to sealant application.

A progressive cleaning procedure should be employed using appropriate solvents and a new lint-free cloth conforming to AMS 3819. (Reclaimed solvents or tissue paper should not be used.) Always pour solvent on the cloth to avoid contaminating the solvent supply. Wash one small area at a time.

It is important that the surface is dried with a second clean cloth prior to the solvent evaporating to prevent the redeposition of contaminants on the substrate.

Substrate composition can vary greatly. This can affect sealant adhesion. It is recommended that adhesion characteristics to a specific substrate be determined prior to application on production parts or assemblies.

For a more thorough discussion of proper surface preparation, please consult the SAE Aerospace Information Report AIR 4069. This document is available through SAE, 400 Commonwealth Avenue, Warrendale, PA 15096-0001.

Packing Options

CA 1000V is supplied in 1 part 6 oz. Semco® cartridges.

Mixing Instructions

CA 1000V is supplied in a 1 part 6 oz. Semco® cartridge. Mixing is not required.

Storage Life

The storage life of CA 1000V is at least 12 months when stored at temperatures below 80°F (27°C) in original, unopened containers.

Health Precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Material Safety Data Sheet (MSDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An MSDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

For industrial use only. Keep away from children.

Additional information can be found at:

www.ppgaerospace.com

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PPG Aerospace
Sealants and Coatings
Darlington Road
Shildon, Co Durham UK
DL4 2QP
www.ppgaerospace.com

Issue Date: 02/16
Lit: 4504