

TECHNICAL DATA

PR-1460-Q Potting And Sealing Compound

Description

PR-1460-Q is a fuel resistant, solvent-free, electrical potting and sealing compound. It has a service temperature range from -70°F (-57°C) to 250°F (121°C), with intermittent excursions up to 275°F (135°C). This material is designed for sealing and insulating of electric connectors, wiring, and other electric apparatus in fuel exposed applications. The cured sealant is resistant to prolonged exposure to both jet fuel and aviation gas.

PR-1460-Q is a two-part manganese dioxide cured polysulfide compound. The uncured material is designed to flow around wires and connections in electrical connectors to provide complete insulation. It cures at room temperature to form a solid elastomer.

The following tests are in accordance with MIL-S-8516 specification test methods

Application Properties (Typical)

Color	
Part A	Black
Part B	Off white
Mixed	Black
Mixing ratio	Part A:Part B
By weight	6.7:100
Base viscosity (Brookfield #6 @ 4 rpm), Poise (Pa-s)	850 (85)
Application life @ 77°F (25°C), 50% RH, hours	2
Cure time to 30 Durometer A @ 77° F (25°C), 50% RH, days	14
@ 140° F (60°C), days	2

Performance Properties (Typical)

Cured 4 days @140°F (60°C)	
Cured specific gravity	1.58
Nonvolatile content, %	99
Ultimate cure hardness, Durometer A	40
Volume shrinkage, %	3.0
Dielectric constant	
100Hz @ 75°F (24°C)	9.6
1 KHz @ 75°F (24°C)	9.3
Dissipation factor	
100Hz @ 75°F (24°C)	0.06
1 KHz @ 75°F (24°C)	0.03
Volume resistivity, ohm-cm @ 75°F (24°C)	5.0 X 10 ¹⁰
Surface resistivity, ohms @ 75°F (24°C)	5.0 X 10 ¹¹
Insulation resistance, megohms @ 75°F (24°C)	20,000
@ 250°F (121°C)	100

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.

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.

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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

PR-1460-Q is supplied in two-part can kits, Semkit® cartridges and pre-mixed and frozen Semco® cartridges.

Mixing Instructions

Mix according to the ratios indicated in the application properties section. Mix Part A and Part B separately to uniformity, then thoroughly mix entire contents of both parts of the kit together taking care to avoid leaving unmixed areas around the sides or bottom of the mixing container.

Storage Life

The storage life of PR-1460-Q supplied in two-part can kits and Semkit® cartridges is at least 6 months when stored at temperatures below 80°F (27°C) in original, unopened containers.

The storage life of PR-1460-Q pre-mixed and frozen is at least 30 days when stored at -40°F (-40°C) or below.

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

For sales and ordering information call
1-800-AEROMIX (237-6649).

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