

PR-1436GA corrosion inhibitive sealant

Description

PR-1436GA is a brushing sealant for use over a temperature range of -55°C to +105°C, with a degree of resistance to aircraft fuels and lubricating oils and resistance to degradation by phosphate ester type hydraulic oils.

PR-1436GA is a dichromate cured polysulphide with a well balanced blend of effective chromates to inhibit corrosion over an extended period of time. The uncured material is a thick liquid suitable for application by brush or roller. The cured sealant maintains excellent elastomeric properties after prolonged exposure to aircraft fuels.

The following tests have been run in accordance with MIL-S-81733.

Application properties (typical)

Colour			
Part A			Black
Part B			Aluminium grey
Mixed			Aluminium grey
Mixing ratio			
Part B:Part A, by weight			10:1
Specific gravity			
Part B			1.45
Part A			2.9
Viscosity of base compound			
Pa-s (poise),			
(Brookfield # 5 @ 10 rpm)			25 (250)
Application life and cure time @ 25°C, 50% RH			
	Application	Maximum	Cure time
	life	Tack free	to 35
	(hours)	time	Durometer A
	(hours)	(hours)	(hours)
A-1/2	1/2	10	30
A-2	2	24	72
Non-volatile content, % by weight			80
Effective chromate content			
% by weight			3 to 5

Performance properties (typical)

Cured 14 days @ 25°C, 50% RH	
Hardness, Durometer A	55
Mixed S.G.	1.45
Peel strength, N/25 mm (pli), 100% cohesion	
Dry	
Stainless Steel	125 (28)
Titanium	125 (28)
Epoxy primer	120 (27)
Polyurethane topcoat	125 (28)
Type III fuel (168 hours @ 60°C)	
Stainless steel	102 (23)
Titanium	102 (23)
Epoxy primer	98 (22)
Polyurethane topcoat	98 (22)
3% NaCl solution (168 hours @ 60°C)	
Stainless steel	115 (26)
Titanium	115 (26)
Epoxy primer	107 (24)
Polyurethane topcoat	107 (24)
Tensile strength, MPa (psi)	
Standard cure	2.4 (350)
Elongation, % at break	175
Resistance to hydrocarbons	
JRF immersion	
Weight loss, %	<6
Flexibility - no cracks over mandrel	
Low temperature flexibility - no cracking, checking or loss of adhesion	
Sandability - compound may be sanded smooth after curing for 30 hours at 25°C, 50% RH.	

Note: The application and performance property values are typical for the material but are 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 metallic, chemically treated, or painted substrates, the surfaces should be cleaned with solvents to remove contamination such as dirt, grease, and/or processing lubricants.

A progressive cleaning procedure should be employed using the appropriate solvents and new lint free cloth (reclaimed solvents or tissue paper should not be used). Always pour the solvent on to 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 redeposition of contaminants on to 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 information on specific substrate treatment please refer to the Surface Treatment leaflet which is available on request.

Storage life

The storage life of PR-1436GA is six months when stored at temperatures between 5°C and 25°C in the original unopened containers.

Health precautions

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