

### PR-1436GB corrosion inhibitive sealant

#### Description

PR-1436GB is a filleting 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-1436GB 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 low sag, thixotropic paste suitable for application by extrusion gun or spatula. 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	
Viscosity of base compound			
Pa-s (poise),			
(Brookfield # 7 @ 2 rpm)		1400 (14000)	
Application life and cure time @ 25°C, 50%RH			
		Maximum	Cure time to
	Application	Tack free	35
	life	time	Durometer A
	(hours)	(hours)	(hours)
B-1/2	1/2	10	30
A-2	2	24	72
Non-volatile content, % by weight			95
Effective chromate content			
% by weight			3 to 5
Slump		B-1/2	B-2
Initial		3	3
50 min after mixing		-	5
90 min after mixing		-	9

#### Performance properties (typical)

Cured 14 days @ 25°C, 50% RH	
Hardness, Durometer A	55
Mixed S.G.	1.45
Peel strength, N/25mm (pli), 100% cohesive failure	
Dry	
Stainless Steel	140 (32)
Titanium	150 (34)
Epoxy primer	135 (30)
Polyurethane topcoat	135 (30)
Type III fuel (168 hours @ 60°C)	
Stainless steel	115 (26)
Titanium	118 (27)
Epoxy primer	105 (24)
Polyurethane topcoat	105 (24)
3% NaCl solution (168 hours @ 60°C)	
Stainless steel	120 (27)
Titanium	125 (28)
Epoxy primer	112 (25)
Polyurethane topcoat	115 (26)
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.

## **PR-1436GB corrosion inhibitive sealant**

### **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-1436GB 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.

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 assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's 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 the 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.