

Aerospace Products





Edition: 06/2000

PR 1436 G (NA)

CORROSION INHIBITIVE SEALANT

USE

PR 1436 G NA is a corrosion inhibitive sealant. It has a service temperature range from -55°C to +135°C. This material acts as an effective barrier against the common causes of corrosion on alluminium alloys or between dissimilar metals. The cured sealant maintains elastomeric properties after limited exposure to both jet fuel and aviayion gas.

DESCRIPTION

PR 1436 G **NA** is a two-part, dichromate cured polysulfide compound. It cures at room temperature to form a resilient sealant having excellent adhesion to commonaircraft substrates.

SPECIFICATION

The following tests have been run in accordance with the requirements of:

-MIL.S.81733 Spécification:

PR 1436 G B 2(NA)

PR 1436 G S

-ASN-A 4165 Spécification.

Standards conditions:

23 +/- 2° C and 50 +/-5 % RH.

PR 1436 G (NA)

When ordering this product, designate PR number, class letter, and dash number as follows:

CLASS A Brushable.

A 1/2 - A 2

CLASSB Fillet.

B1/2 - B 2- B 4

CLASS S Sprayable.

S 1

STANDARD PACKAGING

DESIGNATION

KITS:

	Base Volume	Container	of Kits per case
KIT n° 10	0,10 liter	1/4 l. Can	12
KIT n° 25	0,25 liter	1/2 1. Can	12
KIT n° 50	0,50 liter	1 liter Can	12
KITn° 100	1.00 liter	2 liters Can	6

SEMKITS:

	<u>Total</u> <u>Content</u>	<u>Number</u> per Case
655	55 cc	24
654	100 cc	24

LE JOINT FRANCAIS

SEALANTS ADHESIVES & COATINGS

84/116 rue Salvador Allende, 95870 Bezons - Tél 01.34.23.34.23 - Télécopie 01.34.23.34.99 http://www.ljfm.com HUTCHINSON Group



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Helleruplund Alle 8
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Tel: +45 70 26 70 07
www.reinhardoil.dk

APPLICATION PROPERTIES(typical) Base

-Color

Accelerator		Black	0 00 0 B						
-Quantité de chromates actifs		3 - 5 % By weight							
-Mixing ratio (base/accelerator)		Class A	A(NA)		Class	B(NA)		<u>S</u>	<u>prayable</u>
	By weight By volume	10/1 100/11	(A2)),2(B2)),7(B4)			2,5/1
-Non volatile content (Mixed compound)		80%			95%	.,,,		60	6%
-Viscosity Brookfield Brookfield#-@-rpm		40Pa.s 6@10			1500] 7@2	Pa.s			,5Pa.s @10
A T : C-		1/2	2		1/2	2	<u>4</u>		1
- Application Life 23° C/50% RH		1/2 h	2 h		1/2 h	2 h	4 h		1 h
-Tack Free Time 23° C/50 % RH		12h	20 h		10 h	16h	24h		6 h
-To 30 Shore A 23° C/50% RH		30h	48 h		30h	48 h	72 h		35 h

Aluminium gray

PROPRIETES EN SERVICE (Valeurs types)

-Color	Aluminium gray	
-Specific Gravity	1,45	
-Hardness, Shore A	60 shore A	
-Tensile Strength	2,4 MPa	
-Elongation	175%	
-Adhesion - Peel strength (N/mm)	PR1436GA(NA)	PR 1436GB(NA)
- Initial	3,60	5,50
- After 48 h / 60°C in B*Fluide		5,00
Change Ctrong 4 la		

-Shear Strength

- Initial	1,7 MPa
- After 7 days / 60°C in B*Fluide	1,4 MPa
- After 7 days / 50° C in skydrol 500	1,0 MPa

-Fuel Résistance

- After 7 days 60°C in B*Fluide (Sealant/Fuel:1/300)	Excellent flexibility Weight loss < 6 %
- After 9 days 50° C in B*Fluid with 0,015 % in weight n-butyl mercaptan	Excellent flexibility Weight loss < 6 %

-Résistance to Skydrol

- Hardness	60 shore A
- After 7 days at 50° C in the Skydrol 500	32 shore A

-Corrosion Resistance Compound gives excellent protection against corrosion caused by galvanic coupling of dissimilar metals. after 672 heures / 35°C

-55° Cà+120° C -Temperature range

-45°C -TR10 -55°C -Low Temperature Flexibility -Fungus Resistance Non nutrient

B*Fluide: iso octane-toluène (70/30)

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

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APPLICATION INSTRUCTIONS

Application life is the period of time that the mixed compound remains at a consistency suitable for application with injection or extrusion guns. Application life is always based on standard conditions at 23°C and 50% relative humidity. For evry 5°C rise in temperature, application life is reduced approximately by half, and for evry 5°C it is approximately doubled. High humidity at the time of mixing shortens application life.

PR 1436 G class A (NA)

Can be applied by brush and may be used as an overcoat to aid in feathering and smoothing out fillets as the primary sealant around metal fasteners and over seams, or as a faying surface sealant.

Applymixed compound using parallel strokes over seams and circular motion around fasteners making certain to force sealant into all small gaps. Additional coats should not be applied until sealant becomes firm.

PR 1436 G class B (NA)

Apply the sealant with an extrusion gun equipped with 3 to 6 mm tip. Hold gun nearly perpendicular so that extruded sealant will be forced into the lip of seam.

On most application, the fillet should be 3 to 5 mm thick, but heavier fillets can be applied in a single operation, if necessary.

PR 1436 G S

Sprayable is designed to be sprayed with standard high pressure paint equipement; however, as supplied, it may be too viscous to be easily sprayed. The mixed material can be thinned to a good spraying consistency by adding a 20-30% (by volume) blend of 50% (by volume) methyl ethyl ketone (MEK) and 50% (by volume) toluene, without altering the tack free or application time.

NOTE: To maintain proper application life and cure, the thinner must be added to the material after the base compound and accelerator have been mixed together. Satisfactory results can be obtained by using

Satisfactory results can be obtained by using: - Line pressure of 3,1 bars

- Pot pressure of 0,3 bar.

PR 1436 G S sparayable is easily repaired when the coating has been physically damaged or when necessary for structural work repair. To repair the coating, remove coating with a plexiglass scraper from the damaged area or the area requiring structural rework or repair.

When ready to recoat stripped area, clean metal with an oil-free solvent (reclaimed solvents should not be used). Slightly roughen a strip of coating approximately one inch wide around the periphery of the stripped area. Apply mixed compound by brush in small areas or by spray in large aeras. Be sure freshly applied compound overlaps the existing coating onto the rouhened area.

SURFACEPREPARATION

To obtain good adhesion to metallic surface, part shall be cleaned with solvents to remove dirt, grease, and processing lubricants used in manufacturing.

Wash one small aera at a time, then dry with a clean cloth before solvent evaporates to prevent redeposition of oil, wax or other surface contaminents. To maintain a clean solvant supply, always pour the solvent on the washing cloth.

MIXING INSTRUCTIONS

Proper mixing and correct proportions are extremely important if optimum results are to be obtained. Mixing by experienced personnel at a central location is recommended.

CAUTION: Do not mix accelerator with compound until ready to use.

- 1° Thoroughly stir accelerator in its container until an even consistancy is obtained.
- 2° Thoroughly stir base compound in its container until an even consistancy is obtained.
- 3° Slowly stirthe accelerator into the base compound and thoroughly mix approximately 7 to 10 minutes. Be sure to scrape the sides and bottom of the container in order to include all the compound in the mixture and to assure uniform blending. Scrape mixing paddle periodically to remove unmixed compound. Slowmixing by hand is recommanded.

FRACTIONAL USE OF UNIT:

When it is desired to use only part of the kit, after homogenization, remove the required quantity. (§ APPLICATION PROPERTIES).

SEMKITTWO-PART SEALANT CARTRIDGES

- 1° Wear safety glasses.
- 2° Hold cartridge and pull back dasher rod one fourth.
- 3° Pull back the dasher rod as injecting as proportionnally as possible the contents accelerator into the base.
- 4° Mix material, rotate dasher rod 90° in aspiral clockwise motion; with each stroke turn the dasher rod 90°.
- 5° When two-parts are mixed thoroughly, pull dasherrod back to the neck of cartridge, grasp cartridge firmly at neck, unscrew dasherrod counterclockwise and remove.
- 6° Screw nozzle into cartridge, material is ready for extrusion.

For all informations, consult the Technical Services of LE JOINT FRANCAIS.

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CURING

The lenght of the cure depends on the ambient temperature and relative humidity. The temperature/time relation ship is approximately the same for curing as it is for application life. Low humidities may extend the cure several times. Cure may hastened by applying heat up to 55° C.

Although PR 1436 G NA develops a high state of cure in 14 days at 25°C.

STORAGELIFE

The storage life of **PR1436**G **NA** is 6 months when stored in the original, unopened containers at temperature below 25°C.

HEALTHPRECAUTIONS

WARNING: CONTAINS FLAMMABLE AND VOLATILE SOLVENT.

PR 1436 G **NA** is a safe material to handle when reasonable care is observed. Ordinary hygienic principles, such as washing the compound from hands before eating or smoking, should be observed. Avoid prolonged contact with skin, contact with open breaks in the skin, and ingestion. In case of contact with skin, wipe off excess then wash with soap and water. Obtain medical attention in case of extreme exposure or ingestion.

For additional health and safety information consult a

Material Safety Data Sheet

which is available upon request

GUARANTEED

We guarantee all our products against faulty materials or preparation. Our sole responsability shall be to replace, free of charge, those products which prove to be defective, the user being entitled to no indemnity for any reason whatsoever. All recommendations contained herein as to the choise of materials or of certain methods of operation are of an informative character and are based on tests and experiments we believe to be reliable and correct, but accuracy and completeness of such tests are not guaranteed and are not to be construed as a warranty, either express, or implied.

Neither our company, nor any of its collaborators shall be liable to the user for any injury, loss or damage directly or indirectly resulting from the use of, or inability to use, the products, which does not comply with the application instructions as specified in our information manual.

Recommendations or statements other than those contained in a written document signed by an officer of our company shall not be binding upon the company.

