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 aluminium alloys or between dissimilar metals. The cured sealant maintains elastomeric properties after limited exposure to both jet fuel and aviation 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 common aircraft 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
CLASS B Fillet.
  B1/2 - B 2 - B 4
CLASS S Sprayable.
  S 1

STANDARD PACKAGING

KITS:

<table>
<thead>
<tr>
<th>Base Volume</th>
<th>Container</th>
<th>Number of Kits per Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIT n° 10</td>
<td>0.10 liter</td>
<td>1/4 l. Can</td>
</tr>
<tr>
<td>KIT n° 25</td>
<td>0.25 liter</td>
<td>1/2 l. Can</td>
</tr>
<tr>
<td>KIT n° 50</td>
<td>0.50 liter</td>
<td>1 liter Can</td>
</tr>
<tr>
<td>KIT n° 100</td>
<td>1.00 liter</td>
<td>2 liters Can</td>
</tr>
</tbody>
</table>

SEMKITS:

<table>
<thead>
<tr>
<th>Total Content</th>
<th>Number per Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>655</td>
<td>55 cc</td>
</tr>
<tr>
<td>654</td>
<td>100 cc</td>
</tr>
</tbody>
</table>

**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
APPLICATION PROPERTIES (typical)

- Color
  Base: Aluminium gray
  Accelerator: Black

- Quantité de chromates actifs
  3 - 5 % By weight

- Mixing ratio
  (base/accelerator)
  By weight: 10/1
  By volume: 100/11(A2)

- Non volatile content
  (Mixed compound)
  Class A(NA): 80 %
  Class B(NA): 95 %
  Sprayable: 66 %

- Viscosity Brookfield
  Brookfield #: 40 Pa.s

  - Application Life
    23° C / 50 % RH
     1/2 h    2 h

  - Tack Free Time
    23° C / 50 % RH
     12 h    20 h

  - To 30 Shore A
    23° C / 50 % RH
     30 h    48 h

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)
  - Initial
    PR 1436 GA(NA): 3.60
    PR 1436 GB(NA): 5.50
  - After 48 h / 60°C in B* Fluide
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- 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
    Excellent flexibility
    Weight loss < 6 %
  - After 9 days 50°C in B* Fluid
    Excellent flexibility
    Weight loss < 6 %

- Resistance to Skydrod
  - Hardness
    60 shore A
    32 shore A

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

- Temperature range
  -55°C à +120°C

- TR 10
  -45°C

- Low Temperature Flexibility
  -55°C

- 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.
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 every 5°C rise in temperature, application life is reduced approximately by half, and for every 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. Apply mixed 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 equipment; 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 sprayable 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 areas. Be sure freshly applied compound overlaps the existing coating onto the roughened area.
SURFACE PREPARATION

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 area at a time, then dry with a clean cloth before solvent evaporates to prevent redeposition of oil, wax or other surface contaminants. To maintain a clean solvent 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 stir the 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. Slow mixing by hand is recommended.

FRACTIONAL USE OF UNIT:

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

SEMKIT TWO-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 propotional 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 dasher rod back to the neck of cartridge, grasp cartridge firmly at neck, unscrew dasher rod counterclockwise and remove.

6° Screw nozzle into cartridge, material is ready for extrusion.

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

APPLICATION INSTRUCTIONS

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CURING

The length of the cure depends on the ambient temperature and relative humidity. The temperature/time relationship 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.

STORAGE LIFE

The storage life of PR 1436 G NA is 6 months when stored in the original, unopened containers at temperature below 25°C.

HEALTH PRECAUTIONS

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 responsibility 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 choice 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.