



PR 1827 R 1/6

FUEL TANK SEALANT RAPID CURING

USE

PR 1827 R 1/6 is a flowable rapid curing compound for sealing the faying surface of integral fuel tanks and pressurized cabins.

PR 1827 R 1/6 was especially developed for use over a temperature range of - 55°C + 150°C and will resist aircraft fuels (aviation gasoline or jet fuel), oils and hydraulic fluids.

DESCRIPTION

PR 1827 R 1/6 is a two-part, chemically curing **Permapol P-3** polythioether polymer based sealant characterized by a rapid cure at room temperature to a fuel resistance elastomer.

When used with primer **PR 149** Adhesion Promoter, the sealant adheres to alclad, titanium, stainless steel, coated surfaces and sealant.

The mixed compound may be applied by brush or roller.

SPECIFICATION

75-T-2-5203-1-1.
DAN 1218-06

Standard conditions are :
23+/-2°C et 50+/-5% relative humidity.

LE JOINT FRANCAIS

Sealants, Adhesives and Coatings

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PRODUCT DESIGNATION

PR 1827 R 1/6 Application time : 10 mn

PACKAGING

SEMKITs :

	Total Content	Number per Case
semkit 655	55 cc	24
semkit 654	100 cc	24

APPLICATION PROPERTIES

(23°C / 50 %HR)

Color	
Base	Beige
Accelerator	Black
Mixing ratio	
Base/Accelerator	10 : 1 by weight

Nonvolatile content
 (mixed compound) 90 %

Viscosity	
Base	
(Brookfield # 6 @ 2 rpm)	100 Pa.s
Accelerator	
(Brookfield # 7 @ 10 rpm)	250 Pa.s

Application Life and Cure Time

Application Life minimum (mn)	Tack Free Time maximum (mn)	Cure time to 35 Shore A (hr)
10	45	1

PERFORMANCE PROPERTIES (typical)

Color	Black
Specific Gravity	1,45
- Hardness, Shore A	60
Low temperature flexibility	- 55° C

Shear strength (MPa) at 23°C / 50% HR

	alclad	alodine	P.U coat	epoxy primer
1 hour			1,5	1,5
Initial : 7 days	3,2	3,3	2,5	2,5
48 h / 60°C				
in B *Fluid	3,2	3,3	2,5	2,5
100% cohesive,with Primer	PR 149			

B*Fluide : Iso octane-toluène mixed (70/30)

Adhesion - Peel strength (N/mm) with Primer PR 149 at 23°C / 50% HR

	Primer coating	Top coat
7 days	8	8
48 h / 60°C in fluid MIL-L-7808J	7	6
48 h / 60°C In Nacl 3% fluid	11,5	13
100% cohesive,with Primer	PR 149	

B*Fluide : Iso octane-toluène mixed (70/30)

Tensile Strength and Elongation :

	Tensile strength	Ultimate elongation
Initial	2.4 MPa	150 %

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.

SURFACE PREPARATION

To obtain good adhesion the surface must be cleaned with an oil-free solvents which will dissolve 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.

If necessary apply **PR 149** Adhesion Promoter with a clean brush or by wiping with a gauze pad. Care must be taken with either a brush or gauze to obtain a uniform thin coat - one that is thin enough to cover, but not heavy enough to run.

At standard temperature, allow the adhesion promoter to dry 3 minutes. At lower temperature allow a proportionally longer time to dry.

The sealant may be applied up to 30 minutes after the application of the adhesion promoter. After 30 minutes, the surface should be recleaned and adhesion promoter reapplied.

(Consult **PR 149** Data sheet)

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.

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 proportionally as possible the contents accelerator into the base.
- 4° Mix material, rotate dasher rod 90° in a spiral 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.

APPLICATION

Application time is the period of time when the consistency of the mixed product remains suitable for the application. Application time is always indicated for a temperature of 23°C & 50% RH. This time is approximately reduced by a half for each elevation of temperature by 5°C, and, inversely, doubled for each decrease by 5°C. A relative high humidity when mixing reduces also the application time.

For all informations, consult the Engineering Services of [LE JOINT FRANCAIS](#).

CURING

The cure time is affected by the temperature. The humidity variations have few influences on the cure speed.

CLEANING EQUIPEMENT

Equipment should be cleaned immediately after use with methylethylketone. Use commercial stripping compounds to remove cured sealant.

STORAGE LIFE

The storage life of **PR 1827 R 1/6** is 5 months when stored in the original, unopened containers at temperature of +5°C.

HEALTH PRECAUTIONS

PR 1827 R 1/6 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.

Use adequate ventilation or air-supplied respirators during application. Avoid repeated or prolonged exposure.

In case of overexposure, remove affected personnel to fresh air.

For additional health and safety information consult **Material Safety Data Sheet** which is available upon request on www.ljfm.com

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.



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