



PR 1784 B

WINDSHIELD AND CANOPY SEALANT FAST CURE - CHROMATES FREE

EMPLOI

PR 1784 B is an aircraft windshield and canopy sealant. This material is designed for fillet sealing of properly prepared glass, polycarbonate, acrylic and other aircraft sealing applications.

This product is specifically formulated not to craze substrates. The cured sealant exhibits excellent resistance to UV and weather exposure.

DESCRIPTION

PR 1784 B is a two-part polysulfide liquid polymer. The mixed compound is a thixotropic paste, readily applied by extrusion or injection gun, which does not flow from vertical or overhead surfaces. Sealant has excellent adhesion to common aircraft substrates.

SPECIFICATION

AIMS 04-05-009

PRODUCT DESIGNATION

PR 1784 B - 1/2

(Application life : 30 minutes)

PR 1784 B - 2

(Application life : 2 h)

PACKAGING

KITS :

	Base Volume	Number of kits/case
KIT 10	100 ml	12
KIT 25	250 ml	12
KIT 50	500 ml	12

SEMKITS :

	Total Content	Number of kits/case
Semkit 655	55 ml	24
Semkit 654	100 ml	24
Semkit 654 D	120 ml	24

LE JOINT FRANCAIS

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APPLICATION PROPERTIES (typical)

(23°C / 50% HR)

Color			
Base	Grey		
Accelerator	Black		
Mixing ratio			
Base / Accelerator	100 : 14	by weight	
Nonvolatile content (mixed compound)	97 %		
Viscosity (Brookfield 7 @ 2 rpm)	1000 Pa.s		
Vertical Flow :			
Initial	6mm		

Application Life and Cure Time (hours)

	Application Life	Tack Free Time	To 30 Shore A
B 1/2	1/2	4	6
B 2	2	8	12

PERFORMANCE PROPERTIES (typical)

14 days cure at 23°C / 50% HR.

Color	Black
Specific Gravity	1,4
Hardness, Shore A	40
Low temperature flexibility	-43° C

Adhesion - Peel strength (N/mm)

100% Cohesive

	Initial
Alclad 2024	7
Stainless steel	7
Titanium	7
P 60 A	7
F 70 A	7
Glass with primer(1)	7
Acrylic with primer(1)	7
Polycarbonate with primer (2)	7
(1) PR 186	
(2) PR 141	

Lap shear strength (MPa)

100% Cohesive

	Initial
Alu 2024	1,8 MPa
Stainless steel	1,8 MPa
Titanium	1,8 MPa
P 60	1,8 MPa
F 70 abraded	1,8 MPa

Tensile strength and Elongation

	T.strength (MPa)	Elongation (%)
Initial 14 d/23°C	1,8	600

Resistance to other Fluids :

Excellent resistance to water, alcohols, petroleum base and synthetic lubricating oils, and petroleum base hydraulic fluids and de-icing fluid.

Réparability :

Reparability to itself.

Excellent to both freshly cured as well as fuel aged and abraded fillets for example PR 1425 B.

NOTE : The above 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 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.

In harsh environment, optimum adhesion can be obtained by the use of **PR 141 on Polycarbonate or PR 186 on Acrylic.**

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.

Solvent may craze polycarbonate.

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.

A) Kit

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

1° Thoroughly stir accelerator in its container until an even consistency is obtained.

2° Thoroughly stir base compound in its container until an even consistency 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.

B) Semkit®

- 1-Hold cartridge and pull back dasher rod one fourth.
- 2-Pull back the dasher rod as injecting as proportionnaly as possible the contents accelerator into the base.
- 3-Mix material, rotate dasher rod 90° in aspiral clockwise motion; with each stroke turn the dasher rod 90°.
- 4-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.
- 5-Screw nozzle into cartridge, material is ready for extrusion.

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

CLEANING EQUIPEMENT

Equipment should be cleaned immediately after use an appropriate solvent. Cured material may be removed with commercial product.

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 50° C.

STORAGE LIFE

The storage life of **PR 1784 B** is 6 months when stored in the original, unopened containers at temperature below 26°C.

HEALTH PRECAUTIONS

PR 1784 B 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 choise of materials or of certain methods of operation are of an informative character and are based on tests and experiments we belive 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.

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