

Description

Plexus® Cleaner Conditioner PC-120 is a chemical cleaner and conditioner designed to improve the long-term bond durability of Plexus adhesives when used for adhering aluminum and stainless steel assemblies¹. Fast drying at ambient temperatures, parts can be bonded 1 to 3 minutes after the conditioner is applied.

Typically, water and salt can attack bonded metal structures at the adhesive interface, potentially reducing the overall strength. The active ingredients in this cleaner allow the adhesive to produce a bond which can resist long term exposure to salt water.

Plexus PC-120 acts as a cleaner to remove contaminants on the metal surface. In many circumstances, the use of PC-120 can replace routine solvent cleaning.

Application can be performed by brushing or wiping. Allow the PC-120 to dry slightly before wiping away. Only a thin film of PC-120 is needed. The cleaner/conditioner contains a red dye. As long as a red tint is slightly visible on the metal surfaces, sufficient conditioner has been applied. Once the conditioner is dry, the parts are ready to bond.

Plexus PC-120 is available in 944-mL containers. Coverage is about 250 square feet per 500 ml.

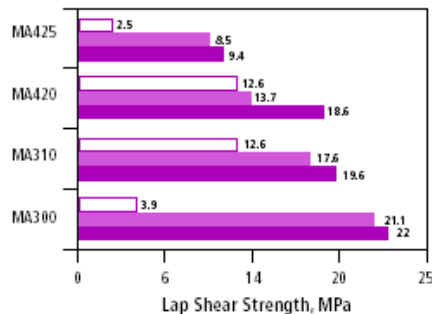
Benefits

- Improves long term bond
- Durability of Aluminum or Stainless Steel bonds
- Fast Drying
- Cleans metal surfaces prior to bonding

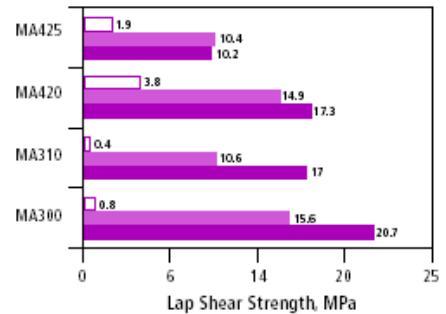
Recommended for use with the following Plexus adhesives when bonding metals:

MA300	MA550	MA920	MA530
MA420	MA320	MA830	MA560-1
MA310	MA425	MA832	MA590

Typical Lap Shear test results of samples with Plexus cleaner conditioner tested before and after salt spray exposure² (37°C, 98% RH, 5% Salt)



Stainless Steel (304)



Aluminium (6061-T6)

Control - With Primer
 2 Weeks in Salt Spray - With Primer
 2 Weeks in Salt Spray - Without Primer

TYPICAL PROPERTIES

Cured Density	0.977 gm/cm(3)
Solids by Volume	5%
Carrier Solvent	Isopropyl Alcohol
Color	Translucent red dye
Flashpoint	55 °F

DIRECTIONS FOR APPLICATION

Plexus PC-120 is a low-viscosity liquid designed to be applied to aluminum and stainless steel parts prior to bonding with Plexus adhesives. Excess oils or contaminants should be wiped from the surface with a clean cloth. The cleaner/conditioner should be applied in a thin layer. The usual application techniques are wiping, brushing, or spraying. Allow the PC-120 to dry slightly before wiping away. PC-120 contains a red dye to assist with proper application. When a light red tint is seen on the assembly enough cleaner/conditioner has been applied. An even amount of cleaner/conditioner across the area to be bonded is recommended. Allow the PC-120 to dry before applying adhesive.

Although Plexus PC-120 is often called a primer, it is not one in the sense that a large coating should be applied to the metal surface. Using PC-120 as a cleaner/conditioner will leave sufficient active ingredient on the metal surface to provide for enhanced protection. Excess amounts appearing in a deep red and heavy coating may produce opposite effects and weaken bonds.

HANDLING AND SAFETY

Plexus PC-120 is flammable. Keep containers closed after use. Avoid skin and eye contact. Wash with soap and water after skin contact. In case of eye contact, flush with water for 15 minutes and seek medical attention. Harmful if swallowed. Keep out of reach of children. Keep away from heat, sparks and open flames.

SHELF LIFE AND STORAGE

Plexus PC-120 has a shelf life of thirteen months in unopened containers when stored at temperatures of 59°F – 86°F (15°C – 30°C).

FOR MORE INFORMATION

For more information, contact ITW PP at 855-489-7262. To assure maximum bond strength, surfaces must be mated within the specified working time of the adhesive.

ITW Performance Polymers

30 Endicott Street
Danvers, MA 01923 USA
TEL: 855-489-7262
FAX: 978-774-0516
e-mail: plexusinfo@itwpp.com

Notes

1. ITW PP strongly recommends that all substrates be tested with the selected adhesive under anticipated service conditions to determine suitability.
2. Attained test values will vary with test method, approach, speed, etc.

All information on this data sheet is based on laboratory testing and is not designed for design purposes. ITW PP makes no representations or warranties of any kind concerning this data. Due to variance in storage, handling, and application of these materials, ITW PP cannot accept liability for results obtained.