AFINITICA®

POLYOLEFIN PRIMER

TECHNICAL DATA SHEET

TDS200207
V2 (MARCH 2017)

AFINITICA® PO PRIMER

PRODUCT DESCRIPTION

Technology	Primer – Cyanoacrylate
Solvent	n-Heptane
Appearance	Transparent liquid
Viscosity	Very low
Cure	Not applicable
Application	CA surface primer

AFINITICA® PO PRIMER is used to make polyolefin and other low energy surfaces suitable for bonding with Afinitica cyanoacrylate adhesives. It is only recommended for difficult-to-bond substrates which include polyethylene, polypropylene, polytetrafluoroethylene (PTFE) and thermoplastic rubber materials. AFINITICA® PO PRIMER is not recommended in assemblies where high peel strength is required.

TYPICAL PROPERTIES

Specific gravity, 25 ºC, g/cm^3: 0.67
Viscosity, Brookfield, 20 ºC, mPa·s (cP): 1.25
Drying time at 20 ºC (seconds): 24

TYPICAL PERFORMANCE

Fixture time and cure speed achieved as a result of using AFINITICA® PO PRIMER depend on the adhesive used and the substrate bonded.

EFFECT ON CURE SPEED OF CYANOACRYLATE ADHESIVES

AFINITICA® PO PRIMER also behaves as an activator and accelerates the cure speed of cyanoacrylate adhesives. Fixturing time on most primed substrates is less tan 5 seconds but 24 hours at room temperatura (22 ºC) should be allowed for adhesive to develop máximum bond strength.

EFFECT ON CURED PROPERTIES OF CYANOACRYLATE ADHESIVES

Products AF02 and BX03 are based on ethyl and 2-methoxyethyl esters respectively. Other AFINITICA liquid products based on these esters will behave in a similar fashion to these examples. AFINITICA® PO PRIMER is not recommended for use with gel products.

TYPICAL PERFORMANCE OF CURED MATERIAL

PERFORMANCE DATA

Substrates treated with AFINITICA® POLYOLEFIN PRIMER

Fixture times:

	Time (s)
Polyethylene and AFINITICA® AF02	10
Polypropylene and AFINITICA® AF02	10
Polytetrafluoroethylene and AFINITICA® AF02	30
Polyethylene and AFINITICA® BX03	15
Polypropylene and AFINITICA® BX03	10
Polytetrafluoroethylene and AFINITICA® BX03	30

After 24h @ 22 ºC (ISO 4587):

	Lap Shear Strength (N/mm^2)
Polyethylene and AFINITICA® AF02	3.5
Polypropylene and AFINITICA® AF02	4.5
PTFE and AFINITICA® AF02	2.1
Polyethylene and AFINITICA® BX03	1.1
Polypropylene and AFINITICA® BX03	3.1
PTFE and AFINITICA® BX03	1.1

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.
For safe handling information on this product, consult the Safety Data Sheet (SDS): 242935.

Directions for use:

1) Before applying the glue, make sure the gluing surface is clean, dry and free of grease.
2) Primer may be applied by spraying at room temperature. Excess primer should be avoided.
3) Apply adhesive to one of the surfaces and assemble the parts within a few seconds.
4) Bonds should be held fixed or clamped until adhesive has fixture.
5) If polyolefin and more active or easier to bond materials are involved, apply the primer to the polyolefin only.
6) Product shelf-life: 12 months.

Conversions:

(ºC x 1.8) + 32 = ºF
kV/mm x 25.4 = V/mil

AFINITICA Technologies S.L.
Edifici Eureka, Campus UAB
08193 Bellaterra (Barcelona) Spain

+34 931 431 952
info@afinitica.com
www.afinitica.com

mm / 25.4 = in
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm^2 x 145 = psi
MPa x 145 = psi
N·m x 8.851 = lb·in
N·mm x 0.142 = oz·in
mPa·s = cP

NOTE

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