

ACE 121 TIMBER PRESERVATIVE

SELECTION DATA

GENERIC TYPE: Epoxy-polyamide. Part A and Part B mixed prior to application. Contains a broad spectrum biocide for protection from fungal and algal growth.

GENERAL PROPERTIES: Very low viscosity, penetrating clear primer/sealer.

RECOMMENDED USES: For timber and concrete. Also acts as a densifier for soft timbers.

NOT RECOMMENDED FOR: Immersion in strong acids or solvents or in corrosive areas without recommended topcoat.

TEMPERATURE RESISTANCE: (Non-immersion)

Continuous: 82°C

Non-continuous: 104°C

May yellow at temperatures above: 66°C

FLEXIBILITY: Very Good

WEATHERING: Good (chalks)

ABRASION RESISTANCE: Excellent

SUBSTRATES: Apply over suitably prepared timber, concrete, masonry or others as recommended.

TOPCOAT REQUIRED: May be topcoated with epoxies, polyurethanes, alkyds, acrylics or others as recommended. Consult PDG Technical Service for specific recommendations.

COMPATIBILITY WITH OTHER COATINGS: Can be applied over most epoxies. For specific recommendations, contact PDG Technical Service.

SPECIFICATION DATA

THEORETICAL SOLIDS CONTENT OF MIXED MATERIAL:

By Volume

ACE 121 Timber Preservative 28% ± 2%

RECOMMENDED DRY FILM THICKNESS PER COAT: 50 microns

THEORETICAL COVERAGE PER MIXED LITRE*

11.2 sq. m/lt at 25 microns

5.6 sq. m/lt at 50 microns

* **Note:** Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements.

SHELF LIFE: Twenty four months minimum when stored at 24°C.

COLOUR: Clear only.

GLOSS: High; will chalk if exposed to sunlight.

PACK SIZES:

ACE 121 Timber Preservative	8 lt	20 lt
Thinner/Clean-up ACE Solvent	4 lt	20 lt

FLASH POINT: (Pensky-Martens Closed Cup)

ACE 121 Timber Preservative Part A 1°C

ACE 121 Timber Preservative Part B 9°C

ACE Solvent 4°C

APPLICATION INSTRUCTIONS

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instruction and application procedure. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials.

SURFACE PREPARATION: Remove any oil or grease from surface to be coated with clean rags soaked in CARBOLINE Thinner #2 in accordance with SSPC-SP 1-82.

Timber: Should be free of chips and splinters. Excessively rough surfaces should be sanded before coating.

Steel: For non-immersion service, abrasive blast to a Commercial Finish in accordance with SSPC-SP 6-85 to a degree of cleanliness in accordance with NACE #3 to obtain a 25-50 micron blast profile.

Concrete: As a curing compound: Apply immediately after forms have been stripped, or on floors as soon as puddled water has evaporated and the concrete can support foot traffic.

As a form release compound: Use clean, dry, untreated Grade 1 plywood. Apply at least two coats, thin first coat 50%. Refresher coats may be applied as needed.

Curing Compound: May be applied to damp, green concrete for ASTM C-309 Type 1 curing compound. Ace 121 Timber Preservative is not a substitute for blasting or acid etching for immersion service.

NOTE: While Ace 121 Timber Preservative may be applied to green concrete, generally additional coats or other coatings should not be applied until the concrete has cured 28 days at 24°C and 50% R.H. or equivalent.

Primer - Remove fins and other protrusions by stoning, sanding or grinding. Remove form oils, incompatible curing agents and hardeners by abrasive blasting. For large holes or pits, use an epoxy surfacer for levelling and uniformity prior to application of Ace 121 Timber Preservative.

Immersion Service - Abrasive blast to open all voids and obtain a surface similar to medium grit sandpaper (horizontal surfaces may be acid etched). Blow or vacuum off sand and dust.

Non-Immersion - Horizontal surfaces must be acid etched or abrasive blasted to remove laitance. For other surfaces, blow off with compressed air to remove dust.

MIXING: Power mix separately, then combine and mix in the following proportions:

	<u>8 lt</u>	<u>20 lt</u>
Ace 121 Timber Preservative Pt A	4 lts	10 lts
Ace 121 Timber Preservative Pt B	4 lts	10 lts

For spray or brush application, may be thinned up to 25% by volume with ACE Solvent. When coating wood, the first coat should be thinned 50% by volume with ACE Solvent.

*. [Allow a 1 hour "sweat-in" prior to application.]

NOTE: Use of thinners other than those supplied or approved by Polymer Developments Group Ltd may adversely affect product performance and void product warranty whether express or implied.

POT LIFE: Twenty four hours at 24°C and less at higher temperatures. Pot life ends when coating becomes too viscous to use.

APPLICATION TEMPERATURES:

	<u>Material</u>	<u>Surfaces</u>	<u>Ambient</u>	<u>Humidity</u>
Normal	18-29°C	18-29°C	18-32°C	30-85%
Minimum	10°C	10°C	4°C	0%
Maximum	32°C	66°C	49°C	95%

Do not apply when the surface temperature is less than 2°C above the dew point. Special thinning and application techniques may be required above or below normal conditions. Use a 50% overlap with each pass of the gun. On irregular surfaces, coat the edges first, making an extra pass later.

NOTE: The following equipment has been found suitable; however, equivalent equipment may be substituted.

Conventional: Use a 3/8" minimum I.D. material hose. Hold gun approximately 12-14 inches from the surface and at a right angle to the surface.

<u>Mfr & Gun</u>	<u>Fluid Tip</u>	<u>Air Cap</u>
Binks #18 or #62	63B	63PB
DeVilbiss P-MBC or JGA	FX	704
Approx. .043" I.D.		

Airless: Use a 3/8" minimum I.D. material hose. Hold gun approximately 18-20 inches from the surface and at a right angle to the surface.

<u>Mfr & Gun</u>	<u>Pump*</u>
DeVilbiss JGB or JGN	QFA-514 or QFA-519
Graco 205-591 or 208-663	B5-18 or B8-36

* Teflon packings are recommended and are available from pump manufacturer. Use a .013 - .015" tip with 2000 psi.

BRUSH OR ROLLER: Use a natural bristle brush or short nap roller with phenolic core. Lambswool applicator may also be used.

DRYING TIMES BEFORE TOPCOATING:

<u>Temperature</u>	<u>Minimum</u>	<u>Maximum*</u>
4°C	24 hours	48 hours
10°C	12 hours	42 hours
16°C	6 hours	36 hours
24°C	2 hours	24 hours
32°C	2 hours	18 hours

* If maximum drying times are exceeded, surface must be wiped with Carboline Thinner #2. If more than one week has elapsed, another coat of Ace 121 Timber Preservative must be applied before topcoating. Failure to take these measures may result in poor adhesion or delamination between coats.

CLEANUP: Use ACE Solvent.

STORAGE CONDITION: (Store Indoors)

Temperature: * 7-43°C Humidity: 0-90%

* Return to minimum application temperature before use.

CAUTION: CONTAINS FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRIC EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMEN SHOULD BE REQUIRED TO USE NONFERROUS TOOLS AND TO WEAR CONDUCTIVE AND NONSPARKING SHOES.