

Selection & Specification Data

Generic Type	Formerly Altex Altra-Prime® 504. Carboguard® 504 is an inert non-inhibitive anti-corrosive modified polyamide cured epoxy primer.
Description	Carboguard® 504 is a high performance and immersion grade (fresh & salt water) chemically cured epoxy primer. Carboguard® 504 may be applied over suitably prepared mild steel, non-ferrous metals and most GRP substrates.
Features	<ul style="list-style-type: none"> • Excellent primer for water and many aqueous chemicals immersion service when top-coated with an approved finish • Excellent adhesion to difficult substrates • Excellent holding primer • Excellent corrosion resistance • Good abrasion resistance • Very good aged re-coatability • Resists splash and spillage or fumes of a wide range of chemicals • Easy application by brush, roller or spray • Ideal tie-coat over inorganic zincs • Versatile - can be used on most substrates under many different types of topcoat • Long pot-life • Excellent maintenance touch-up primer for hand-cleaned substrates • A user-friendly primer for epoxy or polyurethane systems in environments not suited to zinc primers due to acidic or alkaline fallout or splash & spill. • <u>Approval</u> – APAS 2971 “Durable epoxy primer for long term protection of steel”
Gloss	Flat
Colour	Buff
Topcoats	Epoxies, Polyurethanes, CR & Vinyls, Acylics, Alkyds
Dry Film Thickness	40 – 75 microns; optimum 50 microns DFT
Solids Content	50% ± 2% (ASTM D2697 – 7 days)
Theoretical Coverage Rate	10 square metres per litre at 50 microns DFT 80 – 150 microns WFT; 40 – 75 microns DFT
Mix Ratio	4:1 by volume (Part A : Part B)
VOC Values	432 g / litre
Dry Temp. Resistance	121°C - maximum
Limitations	Not suitable for exposure to strong solvents.

Substrates & Surface Preparation

General	Remove any oil or grease from surface to be coated by the two rag method with clean rags soaked in Carboline Thinner #2, or Altex 10/90 Preparation Solvent
Steel	Interior & moderate exterior exposure, abrasive blast AS1627.4 Class 2 or power tool clean. Exterior industrial & marine immersion, abrasive blast to AS1627.4 Class 2½ (SSPC SP10).
Galvanized Steel & Aluminium	Sweep abrasive blast to a matter finish with non-metallic blast media.
Concrete	Concrete should be cured for 28 days at 24°C or equivalent. Acid etch, sweep abrasive blast or high pressure water blast to remove all laitance.
Previously Painted Surfaces	Check existing surface for solvent-resistance and compatibility before commencing work. Spot abrasive blast as required, sweep blast or sand existing sound coating.

Typical Performance Data

Test	Method	Result
Abrasion Resistance	ASTM D4060; CS17 Wheel 250gm load, 1000 cycles	39 mg loss
Adhesion	ASTM D4541	900 psi (6.2 Mpa)
Humidity Resistance	ASTM D2247, 1000 hours	No effect
Impact Resistance	ASTM D2794, 16 gauge (1.6mm) steel	88 inch-pounds (101 kg-cm)
Salt Fog Resistance	ASTM B117, 1000 hr	No effect on film integrity or adhesion, less than 1/8" (3mm) undercutting at scribe, less than 4% rusting at edges.
Pencil Hardness	ASTM D3363	F

Carboguard® 504

Application Equipment

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results. **General Guidelines:**

Spray Application (General) The following spray equipment has been found suitable and is available from manufacturers such as DeVilbiss and Graco.

Conventional Spray Pressure pot equipped with dual regulators, 9mm (3/8") I.D. minimum material hose, 1.8mm (.070") I.D. fluid tip and appropriate air cap.

Airless Spray Pump Ratio: 30:1 (min.)*
Output: 10 lt/min (min.)
Material Hose: 9mm (3/8") I.D. (min.)
Tip Size: .015-.017"
Output PSI: 2100-2400
Filter Size: 60 mesh
*Teflon packings are recommended and available from the pump manufacturer.

Brush & Roller (General) The desired film thickness is easily achieved in a single brush or roller coat; however due to the initial lacquer dry characteristic of this coating additional thinning may be required for a smooth finish. Avoid excessive rebrushing or re-rolling. For best results, tie-in within 10 minutes at 24°C.

Mixing & Thinning

Mixing Power mix Part A and Part B separately, then combine and power mix.

Ratio 4:1 by volume (Part A : Part B)

Thinning Thinning requirement will vary depending upon conditions. Thin using Altex r ½ as required for good atomisation; typically between 5% - 20%.

Pot Life 12 hours at 25°C

Cleanup & Safety

Cleanup Use Altex Thinner 1/2 or Carboline Thinner #2 or Acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

Safety Read and follow all caution statements on this product data sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.

Ventilation When sprayed may be harmful by inhalation - do not breath vapour or spray. Wear suitable clothing, gloves, eye and face protection.

Application Conditions

Condition	Material	Surface	Ambient	Humidity
Normal	16°-24°C	16°-24°C	16°-24°C	30-70%
Minimum	5°C	5°C	5°C	0%
Maximum	32°C	50°C	50°C	95%

Curing Schedule

Surface Temp. & 50% Relative Humidity	Dry to Recoat	Dry to Topcoat w/ Other Finishes	Hard dry
5°	6	6	15 hours
15C	2½	2½	8 hours
25C	1¼	1¼	3 hours
30C	1	1	2 hours

Packaging, Handling & Storage

Pack Sizes NZ 5 litre 10 litre
AU 5 litre 20 litre

Flash Point (Setaflash) Part A: 23°C
Part B 23°C

Storage Temperature & Humidity Store Indoors.
KEEP DRY 4°C-38°C
0-95% Relative Humidity

Shelf Life Part A & B: 24 months minimum

*Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.

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