CAR 300

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	Two-component abrasion resistant ceramic epoxy novolac matrix
Description	CAR 300 is an epoxy novolac ceramic system for the repair of steel surfaces subject to erosion, corrosion and chemical attack. CAR 300 will provide a surface that should also improve flow and equipment efficiency. It may be applied in a single coat application up to 400 microns dry without slumping. Multiple coats will be necessary in extreme circumstances.
Features	• CAR 300 is recommended for quick repair and lining of steel surfaces exposed to wear and chemical attack, i.e. impellers, pipes, valves & pump casings • Excellent abrasion resistance • Easy to apply by brush or roller to achieve a smooth finish • An optional Part C is available for additional reinforcement when a paste is required
Colour	Grey & Blue
Finish	Semi-Gloss
Film Build	When brushing and rolling, 200 to 400 microns per coat is recommended. For spray application, a thickness of 200 microns per coat is recommended. Do not exceed 600 microns dry per coat. If higher thicknesses are required, the product may be reinforced with a non-woven fiberglass to form a laminate. The use of laminates is a prerequisite for concrete lining.
Solid(s) Content	By Volume 98% ± 2%
Theoretical Coverage Rates	4.9 m²/litre at 200 microns dry 2.45 m²/litre at 400 microns dry **NOTE:** Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements
Dry Temp. Resistance	Continuous: 190°C (374°F)
Limitations	• Not recommended for engine components. • Epoxies lose gloss and eventually chalk in sunlight exposure.
Temperature Resistance (Immersion)	Performance is dependent on actual chemical exposure. Refer to Altex Coatings Technical Department. **Most aqueous solutions:** 110°C

SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants as described in SSPC-SP 1 (AS 1627.1).
Steel	Dry abrasive blast to SSPC-SP 10 (AS 1627.4 Sa 2½) and achieve a uniform jagged blast profile of 50µm (minimum) and up to 75µm. For mild environments, power tool clean all surfaces to SSPC-SP 3 (AS 1627.2 St 3).

MIXING & THINNING

Mixing	For best results, the contents of the tin should be mixed together for approximately 4 to 5 minutes using a power mixer. DO NOT mix partial kis - Mix full kits only.
Thinning	A small amount of Altex Thinning Solvent #76 (2 to 5%) may be used to improve flow and levelling when brushing, rolling or spray applying. If to be applied by spray, consult Altex Coatings Technical department for specific equipment recommendations in writing.
Pot Life	30 Minutes at 25°C and less at higher temperatures. Pot life ends when coating becomes too viscous to use.

APPLICATION EQUIPMENT GUIDELINES

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	Do not attempt to install material if temperatures of material and substrate are not within the recommended ranges. The curing time and application properties of the material are severely affected by temperature changes. Do not use water or steam in the vicinity of the application. Moisture can seriously affect the working time and other properties.
Spray Application (General)	Refer to Altex Coatings Technical Department for further information
Brush & Roller (General)	Using a brush or roller, apply product to the desired thickness. If mixed material is left in the container, it will become unusable within 30 minutes, depending on the temperature. If further build-up of coating is required, light abrasive blast or sand the cured surface to create a clear discernible surface profile for improved adhesion. A reinforcing fabric such as woven glass fibre can be bedded into the CAR 300 and overcoated immediately when additional support is required. Clean equipment immediately after use with Altex Thinning Solvent #12 and rinse off in clean water. Wash between coats with potable water and dry with clean cloth prior to overcoating.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	16°C (61°F)	16°C (61°F)	10°C (50°F)	0%
Maximum	32°C (90°F)	32°C (90°F)	40°C (104°F)	85%
Optimum	24°C (75°F)	22°C (72°F)	22°C (72°F)	45%

Do not apply when the surface temperature is less than 3°C above the dew point.
Do not use water or steam in the vicinity of the application. Moisture can seriously affect the working time and other properties. Full cure will not be achieved and performance will be affected.

CURING SCHEDULE

Surface Temp.	Dry to Handle	Dry to Touch	Dry to Recoat	Final Cure
25°C (77°F)	8 Hours	2 Hours	12 Hours	48 Hours

Curing schedule is based on 200-400 microns DFT at 50% RH.
Wash between coats with potable water and dry with clean cloth prior to overcoating.
Post curing at 60°C for 4 hours will accelerate the cure rate to full cure status. This process must be carried out in a gradual increase and subsequent decrease in temperature so as not to shock the system.

CLEANUP & SAFETY

Cleanup	Altex Thinning Solvent #12 & water
Safety	Read and follow all caution statements on this product data sheet and on the SDS 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 used as a tank lining or in enclosed areas, thorough air circulation must be used during and after application until the coating is cured. The ventilation system should be capable of preventing the solvent vapour concentration from reaching the lower explosion limit for the solvents used. In addition to ensuring proper ventilation, appropriate respirators must be used by all application personnel.

PACKAGING, HANDLING & STORAGE

Shelf Life	Part A and B: 24 months minimum at 25°C Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers. For products/components exceeding the stated shelf life, contact Technical Services for further advice.
Storage Temperature & Humidity	4 to 35°C 0 to 90%
Flash Point (Pensky Martens Closed Cup)	Part A: >93°C Part B: >93°C
Shipping Weight (Approximate)	**5 Litre Kit** Parts A & B: 9.5kg **1 Litre Kit** Parts A & B: 1.9kg
Storage	Store indoors and KEEP DRY

WARRANTY

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