Carbomastic 652

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	A two-component epoxymastic coating
Description	Carbomastic 652 is a heavy duty, high build primer or intermediate coating for protection of steel in corrosive environments or water immersion. Low temperature curing and fast overcoatable.
Features	• Excellent anti-corrosive properties • Self-priming capability • Fast recoat time • Excellent leveling with good corrosion protection, also at low DFT • Very good abrasion resistance • NORSOK System 1 and 7B pre-qualified • Excellent for atmospheric and submerged corrosion protection
Color	Off-white, Yellow (RAL 1004) and Grey (RAL 7038) A broad range of colors are available using Carboline RTS Tinting System
Finish	Semi-Gloss
Primer	Self-priming. Can be applied over most tightly adhering coatings. For heavy duty corrosion protection zinc rich primer is recommended as 1.st coat in a paint system.
Wet Film Thickness	150 - 625 µm per coat
Dry Film Thickness	120-500 µm per coat
Solid(s) Content	By volume: 80 ± 2%
Theoretical Coverage Rates	6.7 m²/l at 120 µm DFT 2,7 m²/l at 300 µm DFT Allow for loss in mixing and application.
VOC Value(s)	**As supplied:** 180 g/l These are nominal values and vary with color.
Dry Temp. Resistance	Continuous: 120°C (248°F) Non-Continuous: 150°C (302°F)
Approvals	Grain, Newcastle Occupational Health and Hygiene.
Limitations	Epoxies discolour and eventually chalk in sunlight exposure.

SUBSTRATES & SURFACE PREPARATION

General	Surface must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.
Steel	Surface preparation to be minimum St 3 (ISO 8501-1). Alternatively, ultra high pressure water jetting to Nace No. 7 min. C Vis WJ-2. Max flash rust; C Vis WJ-2M.
Galvanized Steel	Light sweep-blasting (non-metallic abrasive) as per ISO-8501-1 Sa1 or abrade in accordance with ISO-8501-1 St2/St3 to achieve an even roughness and degloss the surface.

SUBSTRATES & SURFACE PREPARATION

Aluminum	Light sweep-blasting to achieve even roughness. Alternatively wash surface with alkaline detergent, e.g. Carboline Surface Cleaner No.3.
Stainless Steel	Light sweep-blasting to achieve even roughness.

MIXING & THINNING

Mixing	Power mix separately, then add Part B to Part A and power mix. DO NOT MIX PARTIAL KITS.
Thinning	Typically not necessary, but depends on material temperature. May be thinned up to 10% with Carboline Thinner #2.
Ratio	3 : 1 (A to B) by volume.
Pot Life	1.5 hour at 20°C and longer at lower temperatures.

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.

Airless Spray	Pump ratio: 45:1 (min.)* GMP Output: 3.0 (min.) Material Hose: 3/8” I.D. (min.) Tip Size: 0.015-0.021” Output PSI: 2400 Filter Size: 60 mesh * Teflon packings are recommended and available from the pump manufacturer.
Brush & Roller (General)	Multiple coats may be required to obtain desired appearance, recommended dry film thickness and adequate hiding.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	5°C (41°F)	-5°C (23°F)	-5°C (23°F)	10%
Maximum	35°C (95°F)	50°C (122°F)	40°C (104°F)	85%

Industry standards are for substrate temperatures to be 3°C above the dew point. Condensation due to substrate temperatures below the dew point can cause flash rusting on prepared steel and interfere with proper adhesion to the substrate. Special application techniques may be required outside normal application conditions.

CURING SCHEDULE

Surface Temp.	Dry to Touch	Dry to Handle	Dry to Recoat	Cure for Service
-5°C (23°F)	48 Hours	3 Days	48 Hours	30 Days
5°C (41°F)	8 Hours	16 Hours	8 Hours	21 Days
10°C (50°F)	6 Hours	12 Hours	6 Hours	14 Days
15°C (59°F)	4 Hours	8 Hours	4 Hours	7 Days
23°C (73°F)	3 Hours	6 Hours	3 Hours	5 Days
32°C (90°F)	2 Hours	4 Hours	2 Hours	3 Days

The above times are based on recommended DFT. Higher DFT, insufficient ventilation or lower ambient temperatures would cause longer curing times. *Maximum recoating time at < 5°C is 72 hours, after this abrade the surface with sandpaper. Maximum recoating time at > 5°C is 2 months for polyurethanes or itself and 1 month for polysiloxanes, after this abrade the surface with sandpaper. If exceeded, contact Carboline for further information about recoating procedures.

CLEANUP & SAFETY

Cleanup	Use Carboline Thinner #2. 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 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 vapor concentration from reaching the lower explosion limit for the solvents used.
Caution	This product contains flammable solvents. Keep away from sparks and open flames. All electrical equipment and installations should be made and grounded in accordance with applicable regulations. In areas where explosion hazards exist, workmen should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

PACKAGING, HANDLING & STORAGE

Shelf Life	24 months at 24°C
Storage Temperature & Humidity	5°- 45°C 0 - 95% relative humidity
Storage	Store indoors
Packaging	Part A: 15 litres Part B: 5 litres

WARRANTY