Manufactured and distributed in Venezuela by:

Pinturas Flamuko

carboline®

Carbomastic 200

PRODUCT DATA

SELECTION DATA

GENERIC TYPE: Epoxy-polyamide coal tar. Part A and Part B mixed prior to application.

GENERAL PROPERTIES: A heavy duty, high build epoxy-coal tar coating for protection of steel and concrete. Easily applied at up to 200 microns in one coat. Material is self-priming.

RECOMMENDED USES: For protection of steel and concrete surfaces from corrosive environments. Good for dams, gates, penstocks (interior and exterior), offshore drilling structures and marine environments, barge and tank hull interiors carrying sour crude and salt water ballast. Good for concrete and steel surfaces in sewage disposal plants, pulp and paper mills, chemical plants, etc.

NOT RECOMMENDED FOR: Immersion in aromatic or ketone solvents, or strong oxidizing acids.

CHEMICAL RESISTANCE GUIDE:

Exposure	Splash and Immersion	Spillage	Fumes
Acids	Very Good	Excellent	Excellent
Alkalies	Very Good	Excellent	Excellent
Solvents (Aliphatic)	Fair	Very Good	Very Good
Salt	Excellent	Excellent	Excellent
Water	Excellent	Excellent	Excellent

TEMPERATURE RESISTANCE (non-immersion) :

Continuous:	70°C
Non-continuous:	93°C

For immersion, temperature depends on exposure, but the maximum is 49°C.

FLEXIBILITY: Fair

WEATHERING: Good (chalks)

ABRASION RESISTANCE: Very Good

SUBSTRATES: Apply to properly prepared concrete, steel or others as recommended.

TOPCOAT REQUIRED: None required.

COMPATIBILITY WITH OTHER COATINGS: Specific recommendations should be obtained before applying over old coatings. Coating is self-priming.

SPECIFICATION DATA

THEORETICAL SOLIDS CONTENT OF MIXED MATERIAL:

	By Volume
Carbomastic 200	80% ± 2%

RECOMMENDED DRY FILM THICKNESS PER COAT:
200 microns

THEORETICAL COVERAGE: *
119,21 m^2/gal (31,5 m^2/l) at 1,0 mils (25 microns)
6,73 m^2/gal (1,78 m^2/l) at 18,0 mils (450 microns)

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

SHELF LIFE: 24 months minimum when stored at 25°C.

COLOURS: Black.

GLOSS: High initial, becomes flat.

ORDERING INFORMATION

APPROXIMATE SHIPPING WEIGHT: **5L**

Carbomastic 200 (KIT)	26 kg (57 lb)

FLASH POINT (Pensky-Martens Closed Cup):

Carbomastic 200 Part A	28°C (83º F)
Carbomastic 200 Part B	81°C (178º F)
Carboline Thinner # 10	28°C (83º F)

July 2009 replaces July 2007

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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 instructions 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 prior to abrasive blast or power tool cleaning.

STEEL: For immersion service, abrasive blast to a White Metal finish in accordance with ISO 8501 Sa3 to obtain a 50–75-micron blast profile. For non-immersion service, abrasive blast to a Commercial finish in accordance with ISO 8501 Sa2 to obtain a 50–75-micron blast profile.

CONCRETE: Do not coat concrete treated with hardening solutions unless test patch indicates satisfactory adhesion. Do not apply coating unless concrete has cured at least 28 days at 25°C and 50% R.H. or equivalent time. Apply to properly prepared concrete that has been acid etched or sweep sandblasted.

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

	5L Kit
Carbomastic 200 Part A	4L
Carbomastic 200 Part B	1L

After mixing, allow 30-60 minutes induction during cold weather, before thinning.

Thin up to 15% by volume with Carboline Thinner # 10.

NOTE: Use of thinners other than those supplied or approved by StonCor Africa may adversely affect product performance and void product warranty, whether express or implied.

POT LIFE: Four hours at 25°C and less at higher temperatures. Pot life ends when coating loses body and begins to sag.

APPLICATION TEMPERATURES:

	Material	Surfaces
Normal	18-29°C	18-29°C
Minimum	13°C	10°C
Maximum	32°C	45°C

	Ambient	Humidity
Normal	16-32°C	35-70%
Minimum	10°C	0%
Maximum	40°C	90%

Do not apply when the surface temperature is less than 3°C above the dew point.

Special thinning and application techniques may be required above or below normal conditions.

SPRAY: Use sufficient air volume for correct operation of equipment. 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 12mm minimum ID material hose. Hold gun approximately 300-350mm from the surface and at a right angle to the surface.

Mfr. & Gun	Fluid Tip	Air Cap
Binks #18 or #62	67	67 PB
DeVilbiss P-MBC or JGA	D (Approx. .086 ID)	64

AIRLESS: Use 12mm minimum ID material hose. Hold gun approximately 450-500mm from the surface and at a right angle to the surface.

Mfr. & Gun	Pump*
Either below	Huskie (DeVilbiss)
Graco 207-300	Bulldog 30:1
Binks Model 520	Jupiter B8-36 37:1

*Teflon packings are recommended and are available from manufacturer. Revers-A-Clean tip is recommended.
Use a .019 - .025" tip with 2400 psi. (166 Bar)

BRUSH: Use a clean, short bristled brush. Work coating into all crevices and avoid rebrushing.

DRYING TIME: Excessive film thickness or conditions of poor ventilation require longer dry times.

Surface Temp & 50% RH	Dry to Touch	Minimum Recoat Time	Maximum Recoat Time	Cure For Immersion
16ºC	8hrs	12hrs	36 hrs	21 Days
24ºC	4hrs	6hrs	36 hrs	7 Days
32ºC	2hrs	3hrs	36 hrs	3 Days

Condensation may result in a surface blush, which will affect intercoat adhesion. Wash surfaces thoroughly with clean, potable water and allow to dry before topcoating.

In direct sunlight, topcoat within 36 hours, sandpaper then wipe surface with CARBOLINE Surface Preparation #1 to ensure good adhesion of next coat.

Force curing is suggested for all tank linings.

*If final cure is attained and recoat is necessary, special surface preparation may be required.

VENTILATION AND SAFETY: When used as a tank lining or in enclosed areas, thorough air circulation must be provided 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 proper ventilation, fresh air respirators or fresh air hoods must be used by all application personnel. Where flammable solvents exist, explosion proof lighting equipment must be used. Hypersensitive persons should wear protective clothing, gloves and/or protective cream on face, hands and all exposed areas.

CLEAN UP: Use Carboline Thinner #2.

STORAGE CONDITIONS (store indoors):

Temperature:	7-43°C
Humidity:	0-100%

CAUTION: MAY CONTAIN 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 ELECTRONIC 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.