

## Selection Data

**GENERIC TYPE** : Modified long oil alkyd.

**GENERAL PROPERTIES** : A high-gloss, alkyd finish enamel that dries to a uniform, tough film. Has very good application properties and can be used over properly primed metal, masonry surfaces or unprimed wood. Compatible with most alkyd primers. Provides excellent protection in mild environments.

**RECOMMENDED USES** : As a finish coat for piping, storage tank exteriors, building interiors and exteriors, ship and boat interiors, and exterior hull above the waterline.

**NOT RECOMMENDED FOR** : Immersion service, or splash and spillage of acids, alkalis or strong solvents.

**CHEMICAL RESISTANCE** :(with recommended topcoat)

<u>Exposure</u>	<u>Splash &amp; Spillage</u>	<u>Fumes</u>
Acids	NR	Poor
Alkalies	NR	Poor
Solvents	NR	Poor
Salt(Brines)	Good	Good
Water	Excellent	Excellent

**TEMPERATURE RESISTANCE** : (Non-Immersion)

Continuous : 200°F( 93°C)  
Non-Continuous : 250°F(121°C)

**FLEXIBILITY** : Excellent

**WEATHERING** : Excellent

**ABRASION RESISTANCE** : Very Good

**SUBSTRATES** : Apply over properly primed metal, masonry surfaces or others as recommended. Apply directly over clean, dry wood.

**TOPCOAT REQUIRED** : Optional second coat will give a longer service life and may be required when covering dark primers with a light color topcoat.

**COMPATIBILITY WITH OTHER COATINGS** : May be applied over most alkyd primers. Specific recommendations include Carboline GP and AD primers.

## Specification Data

**THEORETICAL SOLIDS CONTENT OF MIXED MATERIAL :**

	<u>By Volume *</u>
Carboline AD-51 Finish	45% ± 2%

\*May vary with certain colors.

**RECOMMENDED DRY FILM THICKNESS PER COAT :**

1 1/2 mils (40μ)

**THEORETICAL COVERAGE PER MIXED GALLON\* :**

722 mil sq. ft. (18.0 sq. m/l at 25μ)  
481 sq. ft. at 1 1/2 mils (11.3 sq. m/l at 40μ)

**\*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 75°F(24°C)

**COLORS** : Available in a variety of colors. Consult your local Carboline representative or Carboline Customer Service for availability.

**GLOSS** : High gloss.

## Ordering Information

Prices may be obtained from Carboline sales representative or main office.

**APPROXIMATE SHIPPING WEIGHT :**

	<u>1's</u>	<u>5's</u>
Carboline AD-51 Finish	11 lbs.(5kg)	53 lbs.(24kg)
Carboline Thinner # 45	9 lbs.(4.1kg)	45 lbs.(20.4kg)
Carboline Thinner # 85	9 lbs.(4.1kg)	45 lbs.(20.4kg)

**FLASH POINT** : (Pensky-Martens Closed Cup)

Carboline AD-51 Finish	83°F(29°C) (minimum 28°C)
Carboline Thinner # 45	105°F(41°C)
Carboline Thinner # 85	40°F( 4°C)

# Carboline<sup>®</sup> AD-51

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

**STEEL** : Apply over clean, dry recommended primer and/or tie coat.

**Concrete / Masonry Surfaces** : Apply over clean, dry recommended alkali resistant primer or surfacer.

**Wood** : Apply directly over clean, unprimed surface. First coat may be thinned up 30% by volume for better penetration. A second coat is required for uniform appearance.

**MIXING** : Power mix to a uniform consistency before thinning.

**SPRAY** : Thin up to 10% by volume with Carboline Thinner #85.

**BRUSH** : Thin up to 10% by volume with Carboline Thinner #45.

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

## APPLICATION TEMPERATURES :

	<u>Material</u>	<u>Surfaces</u>
Normal	50-90°F(10-32°C)	55-90°F(13-32°C)
Minimum	35°F( 2°C)	35°F( 2°C)
Maximum	120°F(49°C)	165°F(74°C)

  

	<u>Ambient</u>	<u>Humidity</u>
Normal	55-100°F(13-38°C)	30-95%
Minimum	35°F( 2°C)	0%
Maximum	120°F(49°C)	98%

Do not apply when the surface temperature is less than 5°F (3°C) above the dew point.

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

**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 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. &amp; Gun</u>	<u>Fluid Tip</u>	<u>Air Cap</u>
Binks #18 or #62	63C	63PB
DeVilbiss P-MBC or JGA	FF	704
	Approx..052" I.D.	

**AIRLESS** : Use 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. &amp; Gun</u>	<u>Pump*</u>
DeVilbiss JGB or JGN	QFA-514 or QFA-519
Graco 205-591	President 30 : 1 or Bulldog 30 : 1
Binks Model 700	Mercury 5C or B8-36 37:1

\*Teflon packings are recommended and are available from manufacturer.

Use a .013 -.017 " tip with 2000 psi.

**BRUSH** : Use medium bristle brush, applying with full strokes. Avoid rebrushing.

<u>Temperature</u>	<u>Dry to Recoat</u>	<u>Final Cure</u>
40°F( 4°C)	15 hrs.	84 hrs.
50°F(10°C)	12 hrs.	72 hrs.
60°F(16°C)	10 hrs.	60 hrs.
75°F(24°C)	8 hrs.	48 hrs.
90°F(32°C)	6 hrs.	44 hrs.

**DRYING TIMES** : 1 1/2 mil (40µ) DFT at 50% R.H.

## STORAGE CONDITIONS : (Store Indoors)

Temperature : 35°F-110°F(2-43°C)  
Humidity : 0-100%

**CLEAN UP** : Use Carboline Thinner #2 or Xylol.

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.

