



## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	Ultra high build epoxy
<b>Description</b>	Designed as a premium-grade, ultra-durable epoxy lining, Hydroplate 6500 is ideally suited for use on both concrete and steel surfaces in aggressive, hydrogen sulfide rich municipal and industrial wastewater environments. This reinforced, high-build epoxy offers swift return-to-service times and the convenience of single leg application. Hydroplate 6500 ensures exceptional longevity with its remarkably low permeability and outstanding chemical resistance, guaranteeing long-term durability and performance.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Ultra high build - Up to 250 mils in a single coat</li> <li>• Batch mix formulation, single-leg airless spray</li> <li>• High impact resistance</li> <li>• Superior adhesion properties</li> <li>• Excellent abrasion resistance and flexibility</li> <li>• Can be applied as a single or multi-coat system</li> <li>• Fast return to service</li> <li>• Passes ASTM G210 - Severe Wastewater Analysis Test (SWAT)</li> <li>• Meets the requirements of AWWA C210</li> <li>• Glass flake and ceramic reinforced</li> <li>• Certified for potable water exposure to NSF/ANSI/CAN 600*</li> <li>• Low temperature cure</li> <li>• Can be used as a trowelable mortar</li> </ul> <p>*Valid when manufactured at a certified location.</p>
<b>Typical Uses</b>	Water treatment facilities, immersed steel and concrete in corrosive wastewater environments, water transmission pipe, ductile iron pipe, clarifiers, digesters, lift stations, collection systems, and manholes
<b>Color</b>	Buff (0200)
<b>Finish</b>	Gloss
<b>Primer</b>	Self-priming on steel and most concrete surfaces. To prevent outgassing or for concrete substrates with excessive moisture vapor transmission, a primer is recommended, such as Carboguard 1340 series or Carboguard 510.  Hydroplate 6500 must be applied within 24 hours of the primer application.
<b>Dry Film Thickness</b>	20 - 250 mils (508 - 6350 microns) per coat
<b>Solids Content</b>	By Volume 100%
<b>Theoretical Coverage Rate</b>	1604 ft <sup>2</sup> /gal at 1.0 mils (39.4 m <sup>2</sup> /l at 25 microns) 80 ft <sup>2</sup> /gal at 20.0 mils (2.0 m <sup>2</sup> /l at 500 microns) 6 ft <sup>2</sup> /gal at 250.0 mils (0.2 m <sup>2</sup> /l at 6250 microns) Allow for loss in mixing and application.
<b>VOC Values</b>	<b>As Supplied</b> : 11 g/l



## SELECTION & SPECIFICATION DATA

### Potable Water Certifications

UL Potable Water Certification Rating	Tank	Dry Film Thickness	Cure to Service
	> 200,000 gallons	1-2 coats < 125 mils	1 day

## SUBSTRATES & SURFACE PREPARATION

<b>General</b>	Surfaces 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
<b>Steel</b>	Cleanliness: Abrasive blast to SSPC-SP10 (minimum) Profile: Minimum 3 mil (75 micron) dense, sharp anchor profile free of peening, as measured by ASTM D 4417. Defects exposed by blasting must be repaired and blasted again.
<b>Concrete</b>	Concrete shall be designed, placed, cured, and prepared per NACE No. 6/SSPC-SP 13, latest edition. Abrade to remove all laitance, loose concrete, etc. and to create surface profile in accordance with the appropriate ICRI CSP 3-5. This product can tolerate SSD (saturated surface dry) surfaces. Consult Carboline Technical Service for more specific recommendations.
<b>Non-Ferrous Metals</b>	Surface profile should be a dense angular 1.5 - 3 mils and is best achieved through abrasive blasting in accordance with SSPC-SP16 for atmospheric exposure, or SSPC-SP17, with minimum 3 mils (75 microns) dense, angular profile, for immersion environments.
<b>Ductile or Cast Iron</b>	<b>Immersion and Buried Service:</b> Abrasive blast clean per NAPF 500-03-04. <b>Non-Immersion:</b> Remove all oil and grease from surface by Solvent Cleaning per NAPF 500-03-01.

## MIXING & THINNING

<b>Mixing</b>	This product may be batch mixed and applied using standard airless spray equipment. <b>IMPORTANT:</b> Power mix each component separately, then combine and power mix until homogenous. May be made into a mortar by mixing up to 80 lbs of 30-50 mesh, clean, dry, silica sand into a 4.5 gallon kit.  Component Details for Colors: Buff (0200): The Part A is white (0800) and the Part B is buff (0200)
<b>Thinning</b>	Thinning not normally required.
<b>Ratio</b>	2:1 by volume (Part A to Part B)
<b>Pot Life</b>	30 minutes at 75°F (24°C). Consult Carboline Technical Service for techniques to maximize pot life.

## 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.

<b>General</b>	This is a high solids coating and may require adjustments in spray techniques. Wet film thickness is easily and quickly achieved. The following spray equipment has been found suitable and is available from equipment manufacturers.
<b>Airless Spray</b>	Pump Ratio: 60:1 (min.) GPM Output: 2.5 (min.) Material Hose: 3/8" I.D. (min.) Tip Size: 0.025"-0.035" Output PSI: > 2,500 PSI PTFE packings are recommended and available from the pump manufacturer.
<b>Plural Component Airless Spray</b>	Fixed-ratio (2:1 by volume) plural component equipment may also be used if the material cannot be sprayed within the pot life of the mixed material. Plural spray rig shall have heated hoppers, heated hoses to a mixer manifold through (at least two) static mixers to a 15-25 ft. 3/8" I.D. whip hose. Pre-mix the separate components prior to adding or incorporating into plural component equipment. Heat the material to a maximum of 90°F (32°C), heating material above 90°F (32°C) will negatively impact film build properties.

## APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	30°F (-1°C)	30°F (-1°C)	0%
Maximum	100°F (38°C)	125°F (52°C)	110°F (43°C)	85%

This product requires the substrate temperature to be 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 above or below normal application conditions.

## CURING SCHEDULE

Surface Temp.	Dry to Touch	Dry to Handle
30°F (-1°C)	36 Hours	52 Hours
50°F (10°C)	18 Hours	28 Hours
60°F (16°C)	12 Hours	26 Hours
75°F (24°C)	7.5 Hours	9.5 Hours
90°F (32°C)	3.5 Hours	5 Hours

Dry to Touch and Dry to Recoat is normally 7.5 hours at 75°F (24°C).

**Cure for Service:** Cure for service times are dependent on curing conditions and expected immersion exposure. **Cure to immersion service in water and wastewater environments in 10 hours at 75°F.** Film hardness (Shore D of 75 or greater) and/or solvent resistance (passes a 25 MEK solvent double-rubs\*) are good indications that the lining is suitable for immersion service. Typically this can be from 10-72 hours or longer depending on the curing conditions.

Maximum recoat time is 30 days at 75°F (24°C) and reduces in half for each additional 15°F increase of surface temperature. If the product has exceeded the maximum recoat time, de-gloss and roughen by light sanding or mechanically abrade the surface and remove dust prior to topcoating.

\*No significant color pick-up and some down-glossing is acceptable

## CLEANUP & SAFETY

**Cleanup** | Thinner #2 or #76 are recommended for clean up.

# Hydroplate<sup>®</sup> 6500

## PRODUCT DATA SHEET



### CLEANUP & SAFETY

**Safety** | Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions.

### PACKAGING, HANDLING & STORAGE

<b>Packaging</b>	15 Gal (56.8 L) Kit
	Part A: (2) 5 gallon buckets (Base) Part B: 5 gallon bucket (Hardener)
	4.5 Gal (17.03 L) Kit
	Part A: Short filled 5 gallon bucket Part B: Short filled 3 gallon bucket
<b>Shelf Life</b>	Part A: 12 months at 75 °F (24°C)
	Part B: 12 months at 75 °F (24°C)
<b>Storage Temperature &amp; Humidity</b>	40-100 °F (4-43 °C)
	0-90% Relative Humidity
<b>Storage</b>	Store indoors
<b>Shipping Weight (Approximate)</b>	4.5 Gallon Kit - 53 lbs (24 kg)
	15 Gallon Kit - 174.5 lbs (79.15 kg)
<b>Flash Point (Setaflash)</b>	Part A: > 200°F (93 °C)
	Part B: > 200 °F (93 °C)

### WARRANTY

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. User must contact Carboline to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. Carboline warrants our products to be free of manufacturing defects in accord with applicable Carboline quality control procedures. THIS WARRANTY IS NOT VALID WHEN THE PRODUCT IS NOT: (1) APPLIED IN ACCORDANCE WITH CARBOLINE'S SPECIFICATIONS, AND/OR (2) PROPERLY STORED, CURED, AND USED UNDER NORMAL OPERATING CONDITIONS. Carboline assumes no responsibility for coverage, performance, injuries, or damages resulting from use of the product. If this product is found not to perform as specified upon inspection by a Carboline representative during the warranty period, Carboline's sole obligation, if any, is to replace the Carboline product(s) proven to be defective or refund the purchase price thereof, at Carboline's sole option. Carboline shall not be liable for any other losses or damages. This warranty excludes (1) labor and costs of labor for the application or removal of any product, and (2) any incidental or consequential damages, whether based on breach of express or implied warranty, negligence, strict liability or any other legal theory. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY CARBOLINE, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. All of the trademarks referenced above are the property of Carboline International Corporation unless otherwise indicated. The whole text of this Product Data Sheet, as well as the documents derived from it, have been written in English, and for legal purposes the English version shall prevail.