

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	100% solids aggregate-filled polyamine epoxy
<b>Designation</b>	<p><b>This is a Carboline Specialty Product</b></p> <p>Minimum order quantities and special pricing will apply in North America. Contact your Carboline Sales Representative for more details.</p>
<b>Description</b>	Formulated for optimum chemical resistance to the chemical exposures found in the immersion and highly corrosive environments of municipal wastewater treatment.
<b>Features</b>	<ul style="list-style-type: none"> <li>• Trowel or spray applied</li> <li>• Non-sagging liner</li> <li>• Can be applied to steel or concrete (damp or dry)</li> <li>• Protective liner in one coat application on vertical, horizontal or overhead surfaces</li> <li>• Passes ASTM G210 - Severe Waste Water Analysis Tests (SWAT)</li> </ul>
<b>Color</b>	U62P (Yellow), U74P (Light Grey)
<b>Finish</b>	N/A
<b>Solids Content</b>	By Volume 100%
<b>Coverage Rate</b>	PLASITE 5371 is packaged in premeasured units. One unit will cover 37.4 ft <sup>2</sup> at 1/8" thickness (theoretical). Actual coverage may vary, depending on condition of concrete.
<b>VOC Value(s)</b>	0 lbs/gal (0 g/l) (Calculated)
<b>Topcoats</b>	Not Applicable

## SUBSTRATES & SURFACE PREPARATION

<b>Steel</b>	Remove all oils and greases or other contaminants that may interfere with adhesion. Prepare surface by abrasive blasting to SSPC-SP10 (Near White Metal cleaning) to a minimum 4 mil profile.
<b>Concrete or CMU</b>	<p><b>New 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 4-9.</p> <p><b>Old Concrete</b> Remove oil, grease, foreign contaminants, previously applied paints and deteriorated mortar. 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 4-9.</p>
<b>Masonry</b>	<p><b>Brick Manholes</b> Remove oil, grease, foreign contaminants, previously applied paints and deteriorated mortar. Sandblasting or hydroblasting shall be performed to obtain a good, sound substrate. Areas in which the old mortar has come loose shall be regouted. All leaking cracks shall be repaired with a water stop material. All leaks must be stopped prior to PLASITE 5371 application. Contact Carboline for repair recommendations of heavily damaged surfaces.</p>

## PERFORMANCE DATA

All test data was generated under laboratory conditions. Field testing results may vary.

Test Method	System	Results
Abrasion Resistance	Plasite 5371	99.7 mg weight loss after 1000 cycles with a CS-17 wheel (ASTM D4060-90)
Absorption	Plasite 5371	<0.03%, ASTM C413
Adhesion to Steel	Plasite 5371	>1000 psi, ASTM D4541
Bond to Dry or Damp Concrete	Plasite 5371	Concrete Failure ASTM D4541
Compressive Strength	Plasite 5371	4385 psi, ASTM C579
Flexural Strength	Plasite 5371	1200 psi, ASTM C580
Hardness	Plasite 5371	88 durometer, ASTM D2240
Impact Resistance	Plasite 5371	100 in/lbs Direct; 8 in/lbs Indirect, ASTM D2794
Initial Set Time	Plasite 5371	14 hours at 70 °F, ASTM C308
Modulus of Elasticity	Plasite 5371	30,900 psi, ASTM C580
Tensile Elongation	Plasite 5371	1.35%, ASTM D638
Tensile Strength	Plasite 5371	1529 psi, ASTM C580
Thermal Expansion Coefficient	Plasite 5371	$3.78 \times 10^{-5}$ in/in °F
Working Time	Plasite 5371	30-40 min at 70 °F, ASTM C308

## MIXING & THINNING

**Mixing** | Blend Part B (Hardener) and Part A (Resin) in the five-gallon pail supplied, using a slow speed, paddle-type mixer or a low RPM drill motor mixer. Add Part C (Aggregate) gradually while mixing into Part A/Part B mixture. Mix to uniform consistency.  
**CAUTION!!** Application in direct sunlight and rising surface temperature may result in bubbling, blistering, or pinholes due to expansion of entrapped air or moisture in the concrete. Concrete surfaces that have been in direct sunlight must be shaded for 24 hours prior to application and remain shaded until the initial set has taken place.

**Thinning** | Due to the heavy viscosity of the material, a fine spray atomization cannot be obtained without the use of thinner. Use 10-14 oz of Thinner 213 per kit of mixed material.

**Pot Life** | 60 minutes at 70 °F. Potlife times will be less at higher 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.

**Spray Application (General)** |

- 7:1 swinger unit
- 1" fluid hose
- 3/8" nozzle
- 100 psi air pressure
- 700 psi fluid pressure
- Contact Carboline Technical Service Department for more information

Note: A 10 foot 3/4" ID material hose may be used at the end of the material hose for a "whip" attachment for ease of application.

## APPLICATION PROCEDURES

<b>General</b>	<b>Trowel</b>	A trowel with rounded corners (referred to as a swimming pool trowel) is recommended.
	<b>Spray</b>	When applying by spray, a trowel wipe of the liner surface prior to back rolling is recommended. Prior to application all three components and equipment must be stored at 70 °F to 85 °F for at least 48 hours.
		When the surface temperatures are rising, it may be necessary to postpone the application or apply during the cooler evening hours.
		Trowel or spray apply PLASITE 5371 evenly over surface (building low spots to desired thickness). Apply at approximately 32.3 sq. ft. per unit or 1/8" thick. After each unit has been applied, back roll with a short nap roller dampened with water to remove trowel marks and produce a smooth finish. Do not wet roller excessively. For a smoother, more cleanable finish a glaze coat of Plasite 5371 consisting of parts A and B mixed without aggregate may be rolled or sprayed on.

## APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	70°F (21°C)	50°F (10°C)	70°F (21°C)	0%
Maximum	85°F (29°C)	85°F (29°C)	85°F (29°C)	80%

## CURING SCHEDULE

Surface Temp.	Final Cure Time	Set Time
50°F (10°C)	48 Hours	NR
70°F (21°C)	24 Hours	12 Hours

## CLEANUP & SAFETY

<b>Cleanup</b>	Clean with Thinner 2 or acetone. In case of spillage, absorb and dispose of in accordance with local applicable regulations.
<b>Safety</b>	Read and follow all caution statements on this product data sheet and on the SDS for this product. Employ normal workmanlike safety precautions. Keep container closed when not in use.
<b>Ventilation</b>	When used 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. User should test and monitor exposure levels to insure all personnel are below guidelines. If not sure, use MSHA/NIOSH approved respirator.

## PACKAGING, HANDLING & STORAGE

<b>Shelf Life</b>	Part A: 1 year Part B: 2 years Part C aggregate (optional) 5 years
<b>Storage Temperature &amp; Humidity</b>	25-85 °F (-4-29 °C)
<b>Storage</b>	Store indoors.

## PACKAGING, HANDLING & STORAGE

<b>Shipping Weight (Approximate)</b>	13 lb: Part A (liquid resin) & B (liquid hardener) 1.11 gal unit, no aggregate
	50 lb: Part A & B 2.73 gal with aggregate
	53 lb: Part A & B 2.73 gal with aggregate, includes one empty pail and one lid
	335 lb half bulk kit: Part A & B with measuring tool

DO NOT SPLIT KITS

<b>Flash Point (Setaflash)</b>	Part A: 400 °F (204 °C)
	Part B: 200 °F (93 °C)
	Part C (optional): n/a

## 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.