

# **SELECTION & SPECIFICATION DATA**

Generic Type	Baked Phenolic
Description	A bake coating using a phenolic resin (baked, unmodified) with superior resistance to sulfuric acid and solvents. Conforms to most VOC regulations. Tank lining for solvent, concentrated sulfuric acid, hot water, food products and as a protective coating for machinery parts, filter press plates, fans, etc. PLASITE 3070 L meets the FDA requirements for 21 CFR, 175.300.
	Note: Prior to lining a used sulfuric acid tank or tank car, please refer to Surface Preparation - Steel section.
Color	Buff (changing to Medium Tan after baking).
Dry Film Thickness	5 - 7 mils (127 - 178 microns) total
Dry I min Thickness	2 or 3 coats will produce the recommended dry film thickness of 5 to 7 mils (125-175 microns).
Solids Content	By Volume 42% +/- 2%
Theoretical Coverage Rate	667 ft²/gal at 1.0 mils (16.4 m²/l at 25 microns) 133 ft²/gal at 5.0 mils (3.3 m²/l at 125 microns) 95 ft²/gal at 7.0 mils (2.3 m²/l at 175 microns) Allow for loss in mixing and application.
VOC Values	As Supplied : 3.15 lbs/gal (378 g/l)

# SUBSTRATES & SURFACE PREPARATION

**General** 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.

Steel Immersion: SSPC-SP5 Non-Immersion: SSPC-SP6 Surface Profile: 2.0-3.0 mils (50-75 micron)

# PERFORMANCE DATA

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

Test Method	System	Results
Abrasion Resistance (Taber	Plasite 3070 L	47.8 milligrams average
CS-17 Wheel, 1000 gram weight)	Plasile 3070 L	loss per 1000 cycles
ASTM Method D4366-84	Plasite 3070 L	Konig Pendulum Hardness of 169
Surface Hardness	Plasile 3070 L	seconds a Glass Standard = 250 seconds
Gloss	Plasite 3070 L	30 at 60°
Pigments	Plasite 3070 L	Titanium dioxide and inert pigments
Thermal Shock	Plasite 3070 L	Unaffected 5 cycles, minus 70 °F to plus 200 °F

#### MIXING & THINNING

Mixing | Mix until uniform.





### MIXING & THINNING

**Thinning** Complying with local VOC regulations may require application without additional thinner. If addition of thinner is required, PLASITE Thinner #68 or #71 are recommended.

# 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.

General | The following spray equipment has been found suitable and is available from manufacturers.

Airless Spray Output: 1500 to 1800 psi Tip size: 0.015" to 0.019"

#### APPLICATION PROCEDURES

# **General** All spray equipment shall be thoroughly cleaned and the hose, in particular, shall be free of old paint film and other contaminants.

Experienced applicators may elect to apply the PLASITE 3070 L to the recommended 5 to 7 mil (125 to 175 microns) DFT in two multi- pass spray coats. The following application procedure describes the application of PLASITE 3070 L in three multi-pass spray coats. Apply a "mist" bonding pass.

Airless Spray
 Allow to flash off for several minutes but not long enough to allow film to completely dry. Apply 2 to 3 crisscross multi-passes maintaining a wet appearing film (approximately 3 to 4 wet mils/75 to 100 microns). This will dry to approximately 1.5 to 2 dry mils (38 to 50 microns).
 See curing procedures for air dry and heat curing details before applying additional coats of material.

#### **APPLICATION CONDITIONS**

Condition	Material	Surface	Ambient	Humidity
Minimum	50°F (10°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	90°F (32°C)	100°F (38°C)	100°F (38°C)	80%

#### CURING SCHEDULE

Curing Details	<ul> <li>Air dry with ventilation a minimum of 60 minutes prior to introducing heat.</li> <li>After the air-dry time has elapsed, the substrate temperature should be increased at a time/ temperature rate not to exceed 30 °F every 30 minutes until the intermediate baking temperature has been reached. Hold for 30 minutes.</li> <li>After the substrate has cooled down to good application temperatures, prepare lining for succeeding coats.</li> <li>Repeat the above for each separate coat and intermediate bake.</li> <li>After final intermediate bake, check coating for DFT and holidays. Repair as needed.</li> <li>Final bake at 375 °F (191 °C) (400 °F [204 °C] for concentrated sulfuric acid service) for 90 minutes or until proper color has been attained.</li> </ul>
	<b>Warning:</b> Compared to the low solids baking phenolics, the high solids Plasite 3070 L will produce high film build per coat. Care should be taken not to exceed the recommended final DFT of 5 to 7 mils (127-178 microns) applied in a minimum of two separate coats (approximately 3 mils/76 microns per coat) with a 225 to 250 °F (110 °C to 121 °C) intermediate bake for 30 minutes for each separate coat. Final bake requires 375 °F (191 °C) / 400 °F [204 °C] for concentrated sulfuric acid service) for 90 minutes or until proper color change has occurred.



# **CLEANUP & SAFETY**

Cleanup	Use Plasite Thinner 71. 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 SDS for this product. Employ normal workmanlike safety precautions. Keep container closed when not in use.
Ventilation	When used in enclosed areas and product is thinned, 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 or if not able to monitor levels, use MSHA/NIOSH approved respirator.
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 the National Electric Code. In areas where explosion hazards exist, workers should be required to use non-ferrous tools and wear conductive and non-sparking shoes.

# PACKAGING, HANDLING & STORAGE

Shelf Life	90 days at 70 °F (21 °C)
Shen Life	Higher temperatures reduce shelf life.
Storage Temperature & Humidity	Store all components between 50-75 °F (10-24 °C)
Storage	Store all components in a dry area. Keep out of direct sunlight.
Shipping Weight (Approximate)	1 gallon - 12 lbs (5 kg)

Flash Point (Setaflash) | 91 °F (33 °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 guality 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. AII 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.