

## SELECTION & SPECIFICATION DATA

<b>Generic Type</b>	100% Solids novolac epoxy
<b>Description</b>	Plasite 4555 S is a 100% solids, flake-filled, premium novolac epoxy coating designed for internal steel and concrete tanks and pipe lining. It is a two component system consisting of 4-parts by volume of Part A resin and one part by volume of Part B hardener. It is applied by plural component or single component spray equipment, in a one-coat application (25-30 mils) for internal lining applications.
<b>Features</b>	<ul style="list-style-type: none"> <li>• High impact resistance</li> <li>• Superior bond strength to steel and concrete</li> <li>• Resistance to a broad range of chemicals</li> <li>• Can be applied in a one-coat application up to 30 mils/.75 mm</li> <li>• Easily repaired using inter-coat prep procedures</li> </ul>
<b>Color</b>	Light gray
<b>Finish</b>	N/A
<b>Primer</b>	Priming may be required in situations where outgassing could be a problem. Consult Carboline for primer recommendations.
<b>Dry Film Thickness</b>	25 - 30 mils (635 - 762 microns) in a one coat application.
<b>Typical Uses</b>	<ul style="list-style-type: none"> <li>• Food grade lining</li> <li>• Liquid food products such as orange juice, beer, wine, grape juice, tomato products</li> <li>• FDA Compliant 21CFR175.300</li> </ul>
<b>VOC Values</b>	<b>As Supplied</b> : 0.0
<b>Dry Temp. Resistance</b>	Continuous: 250°F (121°C) Non-Continuous: 300°F (149°C)
<b>Topcoats</b>	Not Applicable

## 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.
<b>Aluminum</b>	Consult Carboline Technical Service
<b>Concrete or CMU</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 5-7.

## MIXING & THINNING

<b>Mixing</b>	To prepare the material for spraying, mix Part A with a jiffy type mechanical mixer for two minutes, mix Part B until color is well blended, then mix Part A and Part B together for two minutes using the jiffy mixer.
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## MIXING & THINNING

**Thinning** | Not recommended

**Pot Life** | 75 °F (24 °C): 45-60 min.

## 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>Airless Spray</b>	<b>Single Component Airless Spray</b> All filters should be removed from the pump Air ratio 45:1 Material hose 3/8" I.D. (minimum) not to exceed 100 In ft Fluid nozzle 0.019-0.35" Inline filter of 60 mesh if desired
	Fixed ratio pump 4:1 by volume Heated hoppers and hoses 50 ft whip hose self-cleaning reverse-a-tip spray nozzle 0.19-0.35" <b>Plural Spray</b> Note: The "A" side should be at a minimum of 110 °F (43 °C) and the "B" side at 90-100 °F (32-38 °C). This will ensure proper spraying of PLASITE 4555 S. Take care to prevent the mixed material from setting up in your hoses. For best results, keep your hoses as short as possible, purge them immediately if work is interrupted, keep them out of direct sunlight and insulated from hot surfaces.

## APPLICATION PROCEDURES

### General

Before mixing and applying any material, make sure environmental conditions are satisfactory for application. Weather conditions, and especially dew point, should be constantly monitored in light of the work being done. Final blast cleaning and application of the lining system must only be performed when it is clear the temperature of the steel substrate will not fall within 5 °F (3 °C) of the dew point. Dehumidification and/or temperature control may be necessary to meet this requirement. Use a surface thermometer to frequently monitor the temperature of the steel substrate. this requirement.

**Spray:** Immediately before applying a spray coat, stripe all continuous welds and edges with a brush-coat to assure adequate protection of these areas.

All spray equipment should be clean and in proper working order. Contact Carboline Technical Service for start-up and clean-up procedures. Adjust pressure to 50-70 psi and open the valves at the manifold and purge materials at the spray gun. Attach spray tip and begin to spray. Dependent upon tip size, each pass will be 8-14 mil/200-350 microns per pass. Apply material to specified thickness. Apply criss-cross multi-passes, moving gun at a fairly rapid rate, maintaining a wet appearing film. Use a wet film thickness gauge to monitor film build.

### LINING REPAIR

Before any touch-up or recoat material can be applied, the first coat must be properly prepared for intercoat adhesion. The first coat must be cured firm to the touch. Coating on floors must be able to support foot traffic. If the first coat cures more than 24-hours, lightly sand or mechanically abrade the surface after scrubbing it down with soap and water. Any surface to be touched up or recoated should be protected. When the recoat material is applied, the surface must be dry and free of all dirt, dust, debris, oil, grease and other contamination.

Force curing may be desirable in certain circumstances. Check with Carboline's Technical Service Department. Plasite 4555 S does have a propensity to blush during its cure cycle. The blush is to be removed before top-coating or placing this material into potable water service.

### Dry Film Thickness

Film build decreases with age  
*Fresh:* Over 60 mils  
*3-6 months:* 30-50 mils  
*After 6 months:* less than 30 mils

## APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	75°F (24°C)	50°F (10°C)	50°F (10°C)	0%
Maximum	150°F (66°C)	100°F (38°C)	100°F (38°C)	85%

Substrate temperature should be 5 °F (3 °C) above the dew point.

## CURING SCHEDULE

Surface Temp.	Dry to Touch	Immersion Service
75°F (24°C)	12 Hours	NR
150°F (66°C)	NR	4 Hours

Flash for 15 minutes and raise temperature 30 °F every 30 minutes. Hold at 150 °F for four hours.

## CLEANUP & SAFETY

### Cleanup

Clean with Plasite Thinner 2. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

## CLEANUP & SAFETY

<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.
<b>Caution</b>	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

<b>Packaging</b>	PLASITE 4555 S is available in one, five gallon units, and 55 gallon kits.
<b>Shelf Life</b>	6 months  To ensure maximum film build, PLASITE 4555 S should be used within three months of the manufacture date. Proper jobsite storage of PLASITE 4555 S is essential to its performance. Follow these general procedures for storage at the jobsite.
<b>Storage Temperature &amp; Humidity</b>	Store tightly sealed in original container at 50-85 °F (10-29 °C). For the 24-48 hours just prior to use, narrow the storage temperature (to 70-85 °F/21-29 °C) to facilitate ease of mixing.
<b>Flash Point (Setaflash)</b>	Part A: 300 °F (149 °C) Part B: 486 °F (252 °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 Company to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to Carboline quality control. We assume no responsibility for coverage, performance, injuries or damages resulting from use. Carbolines sole obligation, if any, is to replace or refund the purchase price of the Carboline product(s) proven to be defective, at Carbolines option. Carboline shall not be liable for any loss or damage. 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.