

SELECTION & SPECIFICATION DATA

Generic Type	Epoxy Polyamide
Designation	This is a Carboline Specialty Product Minimum order quantities and special pricing will apply in North America. Contact your Carboline Sales Representative for more details.
Description	PLASITE 729 is a two-component high build coating based on epoxy resins and a polyamide curing agent. Formulated to provide the end user with a coating that has excellent adhesion and superior flexibility while conforming to current VOC regulations. Plasite 729 is designed as an internal lining for hoppers, silos or covered hopper cars storing or transporting bulk chemicals and dry food products.
Features	- Formulated with fluorocarbon pigmentation to provide excellent release and mass flow properties while maintaining temperature and chemical resistance - Meets FDA requirements for 21 CFR, 175.300
Color	White, Light Gray, & Light Blue
Primer	PLASITE 729 is considered self-priming for those applications in which it is installed. Note: Use PLASITE 729 as the prime coat for PLASITE 729TFE when two coats are required.
Dry Film Thickness	5 - 7 mils (127 - 178 microns) per coat A 5 to 7 mil film is produced in one multi-pass spray coat.
Solid(s) Content	77±2% by volume
Coverage Rate	1371 mil ft ² /gallon (theoretical). For estimating purposes, 183 ft ² /gallon will produce a 6 mil DFT film (20% loss included). The recommended coating dry film thickness for dry bulk service will vary from 5 mils (minimum) to 12 mils depending upon severity of service.
VOC Values	As Supplied : 1.52 lbs/gal (183 g/l) Plasite Thinner #19 : thinned 10% 2.06 lbs/gal (217 g/l)
Dry Temp. Resistance	Continuous: 200°F (93°C)

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-SP10 Non-Immersion: SSPC-SP6 Surface Profile: 2.0-3.0 mils (50-75 micron)
Galvanized Steel	SSPC-SP16 or SSPC-SP11

PERFORMANCE DATA

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

Test Method	System	Results
Abrasion Resistance	Plasite 729	57.5 mg, Taber CS-17 Wheel, 1000 gram weight ASTM D4060-90
Gloss	Plasite 729	63 at 60°
Surface Hardness	Plasite 729	52 seconds, Konig Pendulum (Glass Standard = 250 seconds), ASTM Method D4366-84

MIXING & THINNING

Mixing	The curing agent and coating are supplied in separate containers at a 4:1 ratio. For splitting purposes, use 1 part curing agent to 4 parts coating by volume. Thoroughly mix coating, then add curing agent slowly and mix completely with the coating. No sweat-in time is required at 70 °F. At 50 °F a sweat-in time of 15 minutes is required.
Thinning	Plasite Thinner #19 is recommended. Under normal conditions using airless spray, Plasite 729 can be applied using 5% to 10% thinner by volume.
Ratio	4:1
Pot Life	2 to 3 hours at 70 °F. A decrease in film build properties indicates the end of the useful 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.

Spray Application (General)	PLASITE 729 is formulated for standard production spray equipment and spray application is preferred. All spray equipment should be thoroughly cleaned and the hose, in particular, should be free of old paint film and other contaminants. Use standard production-type spray guns. When airless spray equipment is used, the recommended liquid pressure is 1500-2200 psi, with tip size from 0.015 to 0.021". Air supply shall be uncontaminated. Adjust air pressure to approximately 50 lbs. at the gun and provide 15 to 20 lbs. of pot pressure. Adjust spray gun by first opening liquid valve and then adjusting air valve to give an 8 to 12" wide spray pattern with best possible atomization.
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APPLICATION PROCEDURES

General	Apply a "mist" bonding pass. Apply crisscross multi-passes, moving gun at fairly rapid rate maintaining a wet appearing film until you have a wet film thickness of approximately 6 to 8 mils (approximately 5 to 7 mils DFT). Following a 16 to 24 hour air dry with ventilation, a second coat (if necessary) may be applied as described above. Remove all overspray by sanding, dry brushing or scraping if required. Equipment must be thoroughly cleaned immediately after use with methyl ethyl ketone. Note: Prior to spray application, stripe brush all welds, attachments and surface irregularities using Plasite 729 previously thinned a minimum of 50% by volume with Plasite Thinner #19.
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CURING SCHEDULE

Surface Temp.	Cure for Service
130°F (54°C)	15 Hours
140°F (60°C)	9 Hours
150°F (66°C)	6 Hours
160°F (71°C)	4.5 Hours
170°F (77°C)	3.5 Hours
180°F (82°C)	2.5 Hours
190°F (88°C)	2 Hours
200°F (93°C)	1.75 Hours

Surface Temp.	Dry to Recoat	Final Cure	Tack Free
50°F (10°C)	NR	10 Days	NR
70°F (21°C)	24 Hours	7 Days	8 Hours
90°F (32°C)	NR	5 Days	NR

Curing Details

Adequate ventilation is essential during application and the curing period. The lining should be odor-free prior to being placed in service. Odor- freeness can be more readily accomplished by increasing heating or venting time.

A few curing schedules are listed that may be used for time and work planning. Prior to raising the metal to the force curing temperature, it is necessary that an air dry time of 1 1/2 to 3 hours at temperatures from 50 °F to 100 °F be allowed. After the air dry period has elapsed, the temperature should be raised approximately 30 °F each 30 minutes until the desired force curing temperatures are reached.

Final cure may be checked by rubbing surface with MIBK saturated rag. If the coating softens only slightly after this exposure and no dissolving or sever dulling is observed, the curing can be considered complete for all practical purposes.

CLEANUP & SAFETY

Cleanup

Use Thinner #2 or Acetone. 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, 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

12 months at 70 °F. Material in stock should be turned upside down every 3 to 6 months.

Storage Temperature & Humidity

Store indoors

PACKAGING, HANDLING & STORAGE

Shipping Weight (Approximate)	Approximately 14 lbs/gallon
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Flash Point (Setaflash)	Part A: 24 °F (-4.5 °C) Part B: 51 °F (11 °C)
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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.