

SELECTION & SPECIFICATION DATA

Generic Type	Silicone Rubber Finish
Description	For use as a high performance finish for stainless steel surfaces in service from 300°F (149°C) to 800°F (426°C) with excellent resistance to thermal shock. It is typically used to prevent chloride stress corrosion cracking in service under insulation. For use over carbon steel, it can be applied over modified silicone primers or Carbozinc® 11 series.
Features	<ul style="list-style-type: none"> • Will air dry at ambient • Heat cure for ultimate film properties • Resistant to severe thermal shock
Color	Black only
Finish	Flat (0-10)
Primer	Inorganic zincs; modified silicones
Dry Film Thickness	38 - 51 microns (1.5 - 2 mils) per coat
Solids Content	By Volume 30% +/- 2%
Theoretical Coverage Rate	11.8 m ² /l at 25 microns (481 ft ² /gal at 1.0 mils) 7.9 m ² /l at 38 microns (321 ft ² /gal at 1.5 mils) 5.9 m ² /l at 50 microns (241 ft ² /gal at 2.0 mils) Allow for loss in mixing and application.
VOC Values	As Supplied : 5.1 lbs/gal. (611 g/l) Thinner 235 : Thinned: 12.8 oz/gal (10%): 5.3 lbs/gal (635 g/l)
Dry Temp. Resistance	Continuous: 427°C (800°F)
Topcoats	Not Applicable

SUBSTRATES & SURFACE PREPARATION

General	All surfaces must be thoroughly cleaned to remove dirt, grease, mill scale, loose rust and any other contaminants that can reduce adhesion via SSPC-SP1 solvent cleaning with recommended surface preparation.
Aluminum	SSPC-SP 7
Ferrous Metal	Apply over properly applied and cured primer
Metal	(Stainless steel) SSPC-SP7

MIXING & THINNING

Mixing	Thoroughly mix to a uniform consistency prior to use.
Thinning	Normally not required. May be thinned up to 12.8 oz/gal. (10%) by volume with Thinner #235 for "hot" applications exceeding 150°F (66°C). Use of thinners other than those supplied or recommended by Carboline may adversely affect product performance and void product warranty, whether expressed or implied.

Thermaline 2954

PRODUCT DATA SHEET



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) | Conventional spray application is preferred.

Conventional Spray | Use DeVilbiss P-MBC, E-needle and tip, and a 704 air cap or equal. Use adequate air volume for proper equipment operation. Hold gun 10-12" from the surface and at right angles. Lap each pass 50%. Apply 5.0 wet mils to obtain desired dry film.

Brush & Roller (General) | Use only good quality brushes and roller covers where spray application is not permitted.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	13°C (55°F)	4°C (40°F)	4°C (40°F)	0%
Maximum	35°C (95°F)	149°C (300°F)	49°C (120°F)	90%

This product simply 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	Firm Set	Hard Cure
25°C (77°F)	1 Hour	12 Hours	NR
149°C (300°F)	NR	NR	3 Hours

These times are based on a 2.0 mil (50 micron) dry film thickness. Higher film thickness, insufficient ventilation or cooler temperatures will require longer cure times and could result in solvent entrapment and premature failure. While Thermaline 2954 is an ambient temperature-cure coating, optimum performance properties are achieved when final heat cure occurs at in-service temperatures of 400°F (204°C). Heat cure is at 300°F (148°C) for 3 hours, or 2 hours at 400°F (204°C).

CLEANUP & SAFETY

Cleanup | Use Thinner # 2.

Safety | Read and follow all caution statements on this Product Data Sheet and on the MSDS for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.

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 able to monitor levels, use MSHA/NIOSH approved supplied air respirator.

PACKAGING, HANDLING & STORAGE

Shelf Life	Min. 24 months at 77°F (24°C) *Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.
Shipping Weight (Approximate)	1 Gallon: 10 lbs. (4.5kg) 5 Gallon: 46 lbs. (21kg)
Storage Temperature & Humidity	40°F-100°F (4°- 43°C) 0-90% Relative Humidity
Flash Point (Setaflash)	71°F (22°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.