NCP Coatings, Inc

Siloxane Non-Skid Deck Coating with SiloxoPrime Primer

PRODUCT DESIGNATIONS

SiloxoGrip N-9020A Gray (Spray/Roll Siloxane Nonskid) Type I, Type IV

MIL-PRF-24667

If this product is to be applied as part of a coating system, all components of the system must be as listed on the QPL.

This NAVSEA-REVIEWED ASTM F-718 data sheet is the only data sheet approved for use when utilizing this coating for U.S. Navy preservation projects. NAVSEA's review covers only the application process for the material. The review does not denote the material as a qualified product, nor does it constitute an approval for purchase/procurement of the material. For products on the Qualified Products List (QPL) for this MILSPEC, please refer to https://qpldocs.dla.mil/search/default.aspx.

Questions regarding modifications or updates of this ASTM F-718 shall be directed toward:

NSWCPD

NSWCPD_ASTM_F718.fct@navy.mil

SHIPBUILDERS AND MARINE PAINTS AND COATINGS PRODUCT/PROCEDURE DATA SHEET

I. GENERIC TYPE AND DESCRIPTION: Siloxane Non-Skid Deck Coating with SiloxoPrime Primer Date: 12/17/2020
Specification Number: MIL-PRF-24667C
NOTE: For Type/Grade/Class/Application information see QPD-24667 Type I & Type IV Composition G

II. MANUFACTURERS DATA:

(a) MANUFACTURER: NCP Coatings, Inc

(b) PRODUCT DESIGNATION: SiloxoGrip N-9020A Gray (Spray/Roll Siloxane Nonskid) Type I, Type IV,

(c) COLOR(S): SAE-AMS-STD-595 36076 Gray Type I & Type IV, SiloxoShield color topping and line marking paints.

(d) USES: Type I and IV, Non-Skid Deck Coating

(e) TECHNICAL SERVICE REPRESENTATIVE: Randy Terrill, NCP Coatings, 269-683-3377 (office) randy@ncpcoatings.com

III. PROPERTIES:

(a) PERCENT VOLUME SOLIDS (ASTM D2697): 78.8 +/- 2 %

(b) PERCENT WEIGHT SOLIDS (ASTM D2369): 91.5 +/- 2 %

(c) FLASH POINT (ASTM D3278):

Component A: 100 °F (38 °C)

Component B: 103 °F (39 °C)

Mixed: 100 °F (38 °C)

(d) WEIGHT PER VOLUME (ASTM D1475):

Component A: 18.5 +/- 0.4 lb/gal (2,217 g/L)

Component B: 9.3 +/- 0.4 lb/gal (1,1114 g/L)

Mixed: 16.6 +/- 0.4 lb/gal (1,989 g/L)

(e) PERCENT EDGE RETENTION, IF REQUIRED BY APPLICABLE SPECIFICATION (N/A): N/A %

(f) SHELF LIFE: 12 Months

(g) VISCOSITY (ASTM D562):

A : 7000 cPs / greater than 140 KU @ 77 °F (25 °C)

B : 400 cPs / 65 KU @ 77 °F (25 °C)

Mixed : 6,000 cPs greater than 140 KU 77 °F (25 °C)

(h) PACKAGING: Yields 5-gallons mixed (Part B One 1-gallon container of N-9020B and Part A One 6-gallon container with 4-gallons of N-9020A)

(i) NUMBER OF COMPONENTS: 2

(j) GLOSS (ASTM D523): N/A GU

(k) STORAGE REQUIREMENTS: TEMPERATURE: 40 °F (4 °C) MIN. 100 °F (38 °C) MAX.

ADDITIONAL PAINT STORAGE REQUIREMENTS: Store at 60-80 degrees F for 24 hours prior to application.

(l) VOLATILE ORGANIC COMPOUNDS (VOCS- EPA TEST METHOD 24): 1.52 lb/gal (182 g/L)

(m) WEIGHT PER AREA OF DRY FILM AT 1 MIL THICKNESS: 0.012 lb/sq. ft. (58 g/m²)

(n) SPECIAL PROPERTIES:Low solar absorbing pigments, high weatherability, & hydrocarbon resistant

IV. SURFACE PREPARATION MINIMUM REQUIREMENTS:

(a) INITIAL CLEANLINESS: Surface should be free of dirt, oil, and grease. Perform SSPC-SP1

(b) TOUCH-UP CLEANLINESS: N/A

(c) PROFILE (): N/A mils MIN. N/A mils MAX.

(d) SPECIAL INSTRUCTIONS: N/A

(e) PRIMER REQUIREMENTS: NCP Coatings SiloxoPrime Primer F718 recommends 4-8mils dft per coat. See NCP Coatings SiloxoPrime Primer F718

(f) MAXIMUM ALLOWABLE CONDUCTIVITY (70-micro Siemens/cm):

Click here to enter text

(g) MAXIMUM DEGREE OF FLASH RUSTING ALLOWED: N/A

SPECIAL SAFETY PRECAUTIONS:
Refer to SDS for safety precautions.

V. MIXING PROCEDURES

(a) MIXING RATIOS BY WEIGHT: 7.9:1 (base to hardener
BY VOLUME: 4:1 (base to hardener)

(b) INDUCTION TIME: N/A Minutes

(c) RECOMMENDED CLEANING SOLVENT (NO THINNING ALLOWED): Confined Areas – No Thinning Allowed Non Confined Areas – No Thining Allowed CLEAN UP – 1) Propylene Glycol Monomethyl Ether (PM Solvent) 2) Aromatic Naphtha 3) N-Methyl Amyl Ketone (MAK)

(d) POT LIFE:Click here to enter text

7 Hr(s) @ 50 °F (10 °C)
5 Hr(s) @ 75 °F (24 °C)
4 Hr(s) @ 90 °F (32 °C)
3 Hr(s) @ 100 °F (38 °C)

Graphs included on page: 5

(e) SPECIAL INSTRUCTIONS: Pre-mix Part A (base component) for 3-5 minutes to ensure all material is lifted off bottom of container and is uniformly dispersed. Mix Part A an Part B together for a minimum of 5 minutes. Use intrinsically safe equipment. Use a high torque drill suitable for mixing heavy mastic materials. A jiffy blade or vortex paddle suitable for 6 gallon containers should be used to achieve a uniform and well mixed nonsid. Improperly mixed material will not cure properly.

VI. APPLICATION:

(a) ENVIRONMENTAL LIMITATIONS:

SUBSTRATE TEMPERATURE: 50°F (10°C) MIN. 110°F (43°C) MAX.
AMBIENT TEMPERATURE: 50°F (10°C) MIN. 100°F (38°C) MAX.
DIFFERENCE ABOVE THE DEW POINT: 5 °F (3 °C)
MAXIMUM PERCENT RELATIVE HUMIDITY: 85 %

(b) FILM THICKNESS (SSPC PA2-73T): PER COAT:
mils WET MIN. N/A mils WET MAX.
For best results apply at a rate of 24-26 ft²/gl with roll application and 40-45 ft²/gl for spray application. mils DRY MIN. N/A mils DRY MAX.
TOTAL SYSTEM:
N/A mils DRY MIN. N/A mils DRY MAX.

(c) DRY TIMES (ASTM D1640):

Minimum Overcoat Window:

N/A Hr(s) @ N/A °F (N/A°C)
N/A Hr(s) @ N/A °F (N/A°C)
N/A Hr(s) @ N/A °F (N/A°C)

Maximum Overcoat Window:

N/A Hr(s) @ N/A °F (N/A°C)
N/A Hr(s) @ N/A °F (N/A°C)
N/A Hr(s) @ N/A °F (N/A°C)

Dry to Handle:

72 Hr(s) @ 50 °F (10°C)
24 Hr(s) @ 75 °F (24°C)
18 Hr(s) @ 120 °F (35°C)

Dry to Service:

336 Hr(s) @ 50 °F (10°C)
168 Hr(s) @ 75 °F (24°C)
72 Hr(s) @ 120 °F (72°C)

Graphs included on page 5 or additional information included on page 7

(d) EQUIPMENT REQUIREMENTS: Phenolic hard-core roller with extended handle; ¾ HP, 450RPM power mixer capable of mixing heavy, mastic materials for roll application. For best results use a sprayer qualified to CID A-A-59982 for spray application.

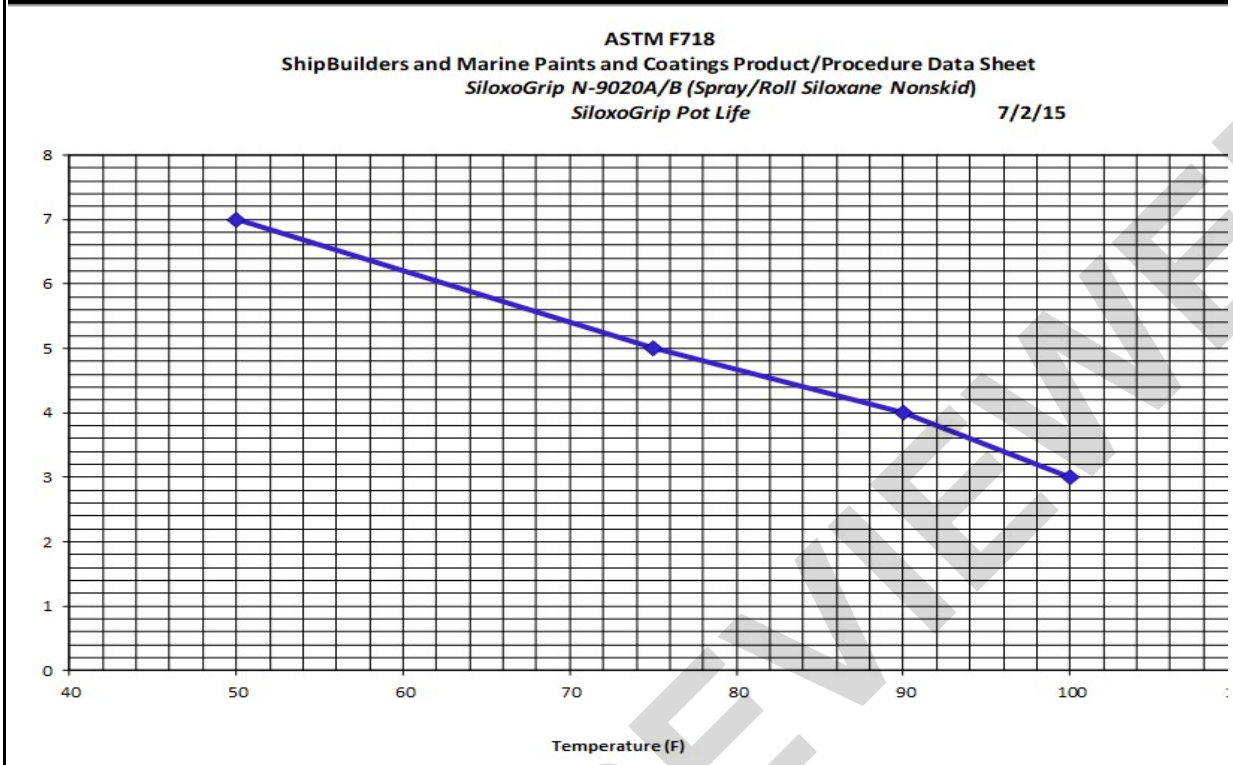
(e) SPECIAL INSTRUCTIONS: Do not apply when deck temperature is under 50 degrees F of over 110 degrees F. 2) At time application, in accordance with MIL-PRF-24667, Material Temperature should be no lower than 60 degrees F or higher than 85 degrees F. 3) Caution should be taken that the surface temperature is at least 5 degrees F above the dew point at application. During application within deck enclosures or on decks confined within the ships structure, it is important to provide a ventilation system that will allow for proper solvent release from the coating. Maintain sufficient volumetric air changes to meet the requirements of 29 CFR Part 1915.36(a)(2) that requires ventilation be provided in sufficient quantities to keep concentration of vapors below 10 percent of their lower explosive limits, measured at the deck level. At a minimum, test shall be made by a competent person to ascertain the concentration every 24 hours, or as conditions change. Both suction (exhaust) and input air (makeup air) shall be utilized. Orient input air such that the make-up air airflow is directed towards the suction ports of the exhaust ventilation. Both input and exhust ports shall be uniformly distributed along correspondingopposing geometries of the containment to facilitate uniform air movement throughout the entire enclosure across and at the work area surface. Exhaust ventilation shall be placed as close to the deck as possible, such that the bottom of the exhaust duct/openings less than one foot from the deck surface, to ensure that ventilation system. Ventilation system shall remain operational and powered on throughout painting evolutions, and continue to 48 hours after application

each coat of the nonskid system (VLA, lines and slick deck color toppings excluded). Maintain at least 4 air changes per hour. Good air movement and drying conditions are critical to the cure and performance of the SiloxoGrip Non Skid system.

IF OVERCOAT WINDOW HAS BEEN EXCEEDED FOR CRITICAL APPLICATIONS: Please prepare as noted in NCP SiloxoPrime F718 for secondary surface preparation after 36 hours. Perform SSPC-SP1 solvent cleaning. Abrade surface with 80 grit sandpaper or equivalent to promote adhesion. Perform SSPC-SP 1 solvent cleaning.

IF OVERCOAT WINDOW HAS BEEN EXCEEDED FOR NON-CRITICAL APPLICATIONS: Please prepare as noted in NCP SiloxoPrime F718 for secondary surface preparation after 36 hours. Perform SSPC-SP 1 solvent cleaning. Abrade surface with 80 grit sandpaper or equivalent to promote adhesion. Perform SSPC-SP 1 solvent cleaning.
//
NCP Coatings SiloxoShield Polysiloxanes are approved for use for color topping and line marking.
//
Superficial crazing/checking may occur in areas of high application thickness when rolled and may take a few weeks to occur. To minimize occurrence, it is recommended to use experienced applicators that can apply a consistent texture of non-skid, avoiding areas of high build-up. These are not detrimental to Polysiloxane non-skid performance.
//
For the best results apply at a rate of 24-26 sq ft/gallon with roll application and 40-45 sq/gallon for spray application.

GRAPHS FOR POT LIFE AND CURE TIMES:



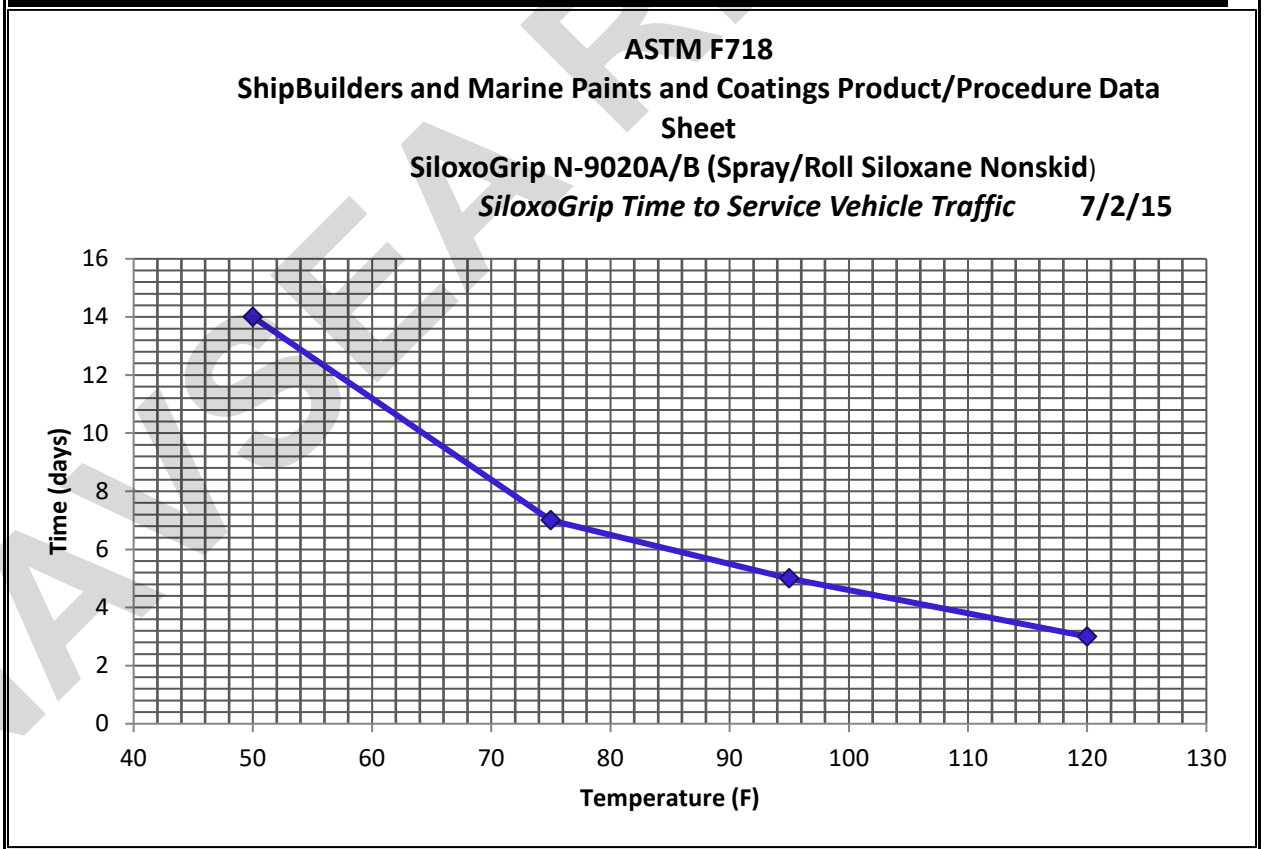


Figure 3. NCP SiloxoPrime Maximum Cure to Recoat Time Prior to Topcoating With NCP SiloxoGrip
N-9020 - Non- Critical Areas

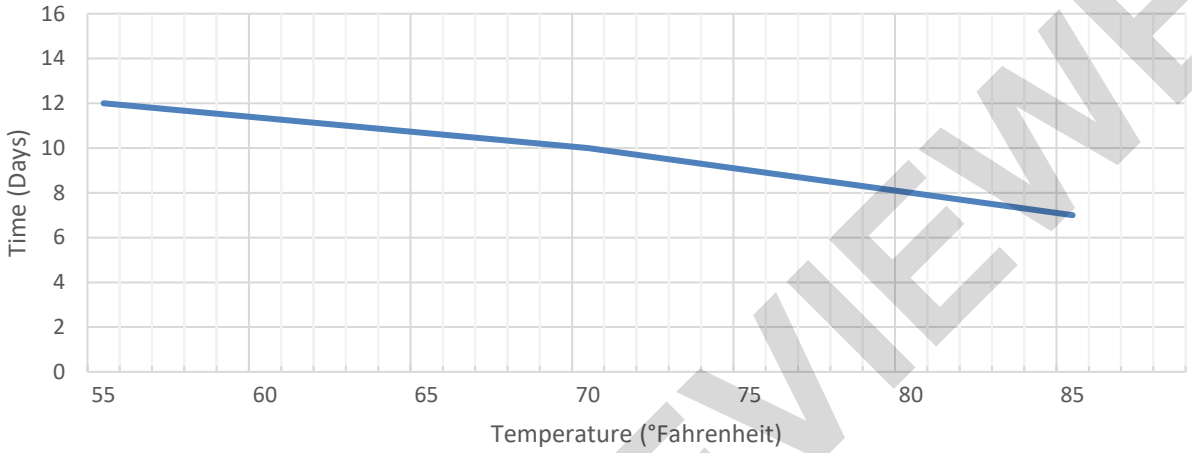
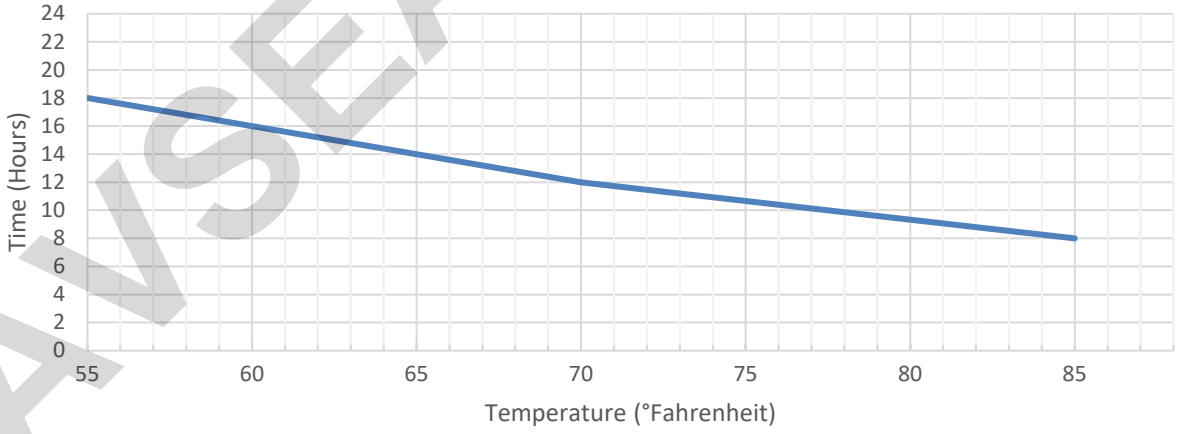


Figure 1. NCP SiloxoPrime Minimum Cure to Recoat Time When Topcoated With NCP SiloxoGrip
N-9020



ADDITIONAL DATA/INSTRUCTIONS:

I. GENERIC TYPE AND DESCRIPTION: N/A

II. MANUFACTURERS DATA: N/A

III. PROPERTIES: N/A

IV. SURFACE PREPARATION MINIMUM REQUIREMENTS: Cleaning via UHP-WJ does not create an anchor tooth profile additional blasting may be necessary to create an acceptable specified profile prior to application of approved primer

V. MIXING PROCEDURES: Improperly mixed material will not cure properly.

VI. APPLICATION: Dry times are normally a function of humidity, ventilation and temperature. Information given is to be used as a guideline only. The technical data given herein has been compiled for your assistance and guidance. It is based upon our experience and knowledge. No warranty, expressed or implied, is intended or given.