

STIC-ADHESIVE Products Co., Inc.

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Technical Data Sheet

MIL-PRF-24635 Silicone Alkyd Enamel Exterior, Weather-Resistant, Coating System Type III - < 250g/L VOC, Class 1, 2 & 3 STIC-KOTE S-42-635 Series

(meets Detail Specification MIL-PRF-24635E dated September 15, 2009)

02/2010

DESCRIPTION

The STIC-KOTE S-42-635 series are high-performance, Silicone Alkyd enamels designed to provide a tough, durable top-coat finish to exterior surfaces. These one-component coatings are specifically designed for exterior use in marine and industrial environments. This product is particularly suited for protecting non-submerged, exterior surfaces of marine vessels and offshore platforms. It may also be used for coating steel storage tanks, and top coat finishing of structural steel, railings, pumps, and other equipment subject to corrosive elements. This product can be applied by brush, roller or spray to smooth metal, glass reinforced plastic (GRP), wood, and composite/plastic surfaces. Performance characteristics of this paint include good color and gloss retention, as well as good flexibility. This paint is a lead-free, non-chromate, and non-asbestos product.

STIC-KOTE S-42-635 series coatings are Type II coatings for use where maximum VOC limits are allowed to exceed 250 g/L, but may not exceed 340 g/L. The STIC-KOTE S-42-635 series coatings are Type III coatings for use where maximum VOC limits are not allowed to exceed 250 g/L.

MILITARY SPECIFICATION

MIL-DTL-24635E complies with Performance Specification MIL-PRF-24635E, dated September 15, 2009. Type III, Class 1 (High gloss), Class 2 (Semigloss), Class 3 (Low gloss); Grade A (standard pigment) and is listed accordingly on the DOD QPD/QPL-24635, dated September 15, 2009.

APPLICATION PROPERTIES

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|---|---|
| 1) Volatile Organic Compound:
(VOC EPA Method 24): | Less than 250 g/L (2.08 lb/gal) |
| 2) Color: | Available in various Fed. Std. 595B colors |
| 3) Finish: | Class 1: High gloss; Class 2: Semi-gloss; Class 3: Low gloss |
| 4) Weight Solids: | 73% ± 2% (minimum) |
| 5) Volume Solids: | 61% ± 2% (minimum) |

USE PROPERTIES

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|------------------------|--|
| 1) Shelf Life: | 2 years from date of manufacture (if unopened) |
| 2) Flash Point (SETA): | 101°F (38.3° C) |
| 3) Reducer: | Do not reduce |
| 4) Tinting: | Do not tint |
| 5) Clean Up: | Mineral Spirits |

TECHNICAL DATA SHEET

- 6) Brush and Roller Recommendation:
Natural bristle brush
3/8" woven roller cover with solvent resistant core
- 7) Application Temperature: 50°-90°F (10°-32.2° C) for surface, paint, and ambient air
NOTE: need to be at least 5°F above dew point
- 8) Application Humidity: Maximum of 85% relative humidity
- 9) Storage: Store product in accordance with local, state and federal regulations.
Keep container tightly sealed and store indoors in dry conditions at 50°-80°F (10°-26.7° C).

RECOMMENDED COATING SYSTEMS

- Steel and Aluminum: 1 coat TT-P-645B applied at 1.8-3.5 mils (45-88 microns) dry thickness or 2 coats MIL-DTL-24441D/formula 150 applied at 3-4 mils (75-100 microns) dry thickness; and
1-2 coats MIL-DTL-24635E applied at 2-3 mils (50-75 microns) dry thickness.
- Wood, Previous Painted Material: 1-2 coats MIL-DTL-24635E applied at 2-3 mils (50-75 microns) dry thickness.

SURFACE PREPARATION

Surface must be clean, dry and in sound condition, free from loose mill scales, dirt, dust, rust, oil and grease. Remove all loose scales, peeling, flaking paint, rust, corrosion and chalk from the surface before painting.

- 1) Steel, Iron
Minimum surface prep: Hand Tool Cleaning per SSPC-SP2
Additional surface prep: Solvent Cleaning per SSPC-SP1 (removing oil, grease, dirt, and other foreign material)
Better performance surface prep: Commercial Blast Cleaning per SSPC-SP6/NACE No. 3. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils/50 microns)
Prime bare steel within 8 hours or before flash rusting occurs.
- 2) Aluminum
Recommended surface prep: Solvent Cleaning per SSPC-SP1 (removing oil, grease, dirt, and other foreign material). Use primer.
- 3) Galvanized Steel
Weathered for greater than 6 months: Solvent Cleaning per SSPC-SP1 (removing oil, grease, dirt, and other foreign material).
New or treated with chromates or silicates: Solvent Cleaning per SSPC-SP1 (removing oil, grease, dirt, and other foreign material). Apply first to a test area, and test adhesion after one week. If adhesion is weak, brush-off blast per SSPC 7/NACE No. 4.
Rusted: Hand Tool Cleaning per SSPC-SP2. Use primer once dry.
- 4) Wood
Sand smooth. Surface must be clean and dry. Do not paint in wet or foggy conditions. Priming is not necessary.
- 5) Previous Painted Surfaces

TECHNICAL DATA SHEET

If previous paint is significantly weathered or peeling, remove the previous paint and clean the surface. If the previous paint is in good condition, clean the surface of any dust, dirt, rust, oil and grease. Abrade any smooth, hard or glossy surfaces to a dull appearance to promote adhesion. Apply first to a test area, and test adhesion after one week. If adhesion is weak, or this product degrades the original finish, remove previous coating for best performance.

APPLICATION INSTRUCTIONS

- 1) Complete surface preparation as indicated prior to application of product.
- 2) Mix paint thoroughly with low speed power agitation prior to use.
- 3) Apply paint at the recommended film thickness and spreading rate. Applying the paint above maximum or below minimum recommended spreading rate can have negative effects on performance.

RECOMMENDED SPREADING RATE PER COAT

1) Approximate Coverage (3-4 wet mils)	<u>ft²/gal</u>	<u>m²/L</u>
Minimum:	380 ± 20 sq.ft.	9.3 ± 0.5 sq. meters
Maximum:	640 ± 20 sq.ft.	15.7 ± 0.5 sq. meters
2) Wet mils	<u>mils</u>	<u>microns</u>
Minimum:	2.5 mil	63
Maximum:	4.0 mil	100
3) Dry mils		
Minimum:	1.5 mil	40
Maximum:	3.0 mil	76

Application by brush or roller may require multiple coats to lay down the maximum film thickness and to achieve a uniform appearance.

DRYING TIME

	<u>@50°F (10°C)</u>	<u>@77°F (25°C)*</u>
To Touch:	4 hours	2 hours
To Recoat:	12 hours	8 hours
To Cure:	7 days	48 hours

NOTE: These times are approximations and will change depending on temperature, humidity, and thickness of applied film. * - Tested at 50% relative humidity.

ORDERING INFORMATION

Sizes: 1 gallon can, 5 gallon can (3.78L, 18.9L)
Product: BLOCK-KOTE 5300 series
Website: <http://www.milspeccoating.com>

SAFETY

Refer to the Material Safety Data Sheet (MSDS) before using this product, for safe use, handling and storage.

OTHER INFORMATION

HEALTH AND SAFETY INFORMATION:

Refer to Material Safety Data Sheet for health and safety information before using this product. Also, for additional information, please visit the website at www.sticadhesive.com.

LIMITATION OF REMEDIES AND LIABILITY:

If the STIC-ADHESIVE product is proved to be defective, the exclusive remedy, at STIC-ADHESIVE'S option, shall be to refund the purchase price or replace the defective product. STIC-ADHESIVE shall not otherwise be liable for

TECHNICAL DATA SHEET

loss or damages, regardless of the legal theory, including but not limited to contract, negligence, warranty, or strict liability.

DISCLAIMER:

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