



# WILKO PAINT, Inc.

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MANUFACTURERS OF THE FINEST INDUSTRIAL FINISHES

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## SILICONE ALUMINUM WILKO NO. 849.01

**PRODUCT DESCRIPTION:** No. 849.01 Silicone Aluminum is a one package, ready mixed silicone coating designed for high temperature service up to 1200°F continuous.

**TYPICAL USES:** As exterior finish for mufflers for construction and general transportation vehicles and as maintenance coatings where fast dry, high gloss, durability and heat resistance of up to 1200°F are required.

**GENERIC TYPE:** Silicone

**COLOR:** Aluminum

**COMPONENTS:** One

**WEIGHT PER GALLON:** 9.3 ± .5 lbs

**VOC:** 4.5 lbs

**SOLIDS BY VOLUME:** 36 ± 2.0%

**COVERAGE:** @1 mil DFT      *Theoretical* - 577 sq. ft./gal.  
*Practical* - 462 sq. ft./gal.

**RECOMMENDED THICKNESS PER COAT:**  
1.5 mils (1200°F)  
2 mils (500°F)

**DRYING TIME @77°F**  
To Touch: 1-2 hours  
To Handle: 3-4 hours  
To Recoat: 8 hours

Full Cure: Slowly increase service temperature to 350°F to 450°F over a six hour time period before exposing to high operating temperature to obtain optimum properties. Coating will remain thermoplastic for a period of time, especially at temperatures between 150 °F and 500°F

**RECOMMENDED THINNER:** No. 13 or Retarder No. 100

**REDUCTION:** Below 85 °F:Up to 25% No. 13  
Above 85 °F:Up to 25% No.100

Do not use more than 48 oz of thinner per gallon of 849.01 to keep VOC level below the AIM limit of 5.4#/gal for high temperature coatings.

**CLEAN UP THINNER:** No. 13 or MEK

**RECOMMENDED PRIMERS:** Material may be applied directly to properly prepared metal. For enhanced corrosion resistance use Wilko No. 859-06 Primer Inorganic Zinc Rich or 809-01 Silicone Primer. 809-01 is preferred for high heat conditions (above 500°F). Do not use organic primers for high temperature applications.

**RECOMMENDED SUBSTRATE:** Steel

### SURFACE PREPARATION:

**Over Primers:** Must abrasive blast clean to conform to NACE#1 or SSPC-SP5 White Metal Blast prior to application of primer. Refer to Product Data of primer for detailed application procedures.

**Direct To Metal:** Abrasive dry sandblast cleaning to conform to SSPC-SP5 White Metal Blast or Nace #1 is required for optimum performance.

### EQUIPMENT REQUIRED:

#### **Conventional Spray:**

1. Pressure pot with dual air regulator.
2. Spray gun such as a DeVilbiss MBC with an AV-601 EX fluid tip, 496 DEX needle and 704 or 64 air cap, or Binks No. 18 or 2001 spray gun with a 66 PB nozzle
3. A 25-50 foot length of fluid hose - ½ inch ID minimum.
4. A minimum of 75psi continuous air supply to each spray gun.

**Airless Spray:** Airless spray equipment with pump ratio of 28:1 or 30:1 and spray tip with orifice diameter of 0.015 to 0.019 should be used.

### APPLICATION PROCEDURE:

May be applied by brush, roller or spray. Spray application is preferred for production of film depth consistency & optimum cosmetic value. Apply a uniform coat, allowing 2-hour solvent release following each coat (use a cross-coat method). Apply heat at operating temperature for at least 4 hours for complete cure, or slowly resume continuous operation.

**Topcoating Inorganic Zinc:** The primer must exhibit full cure. Refer to product data, No. 859-06. Apply 1 coat No. 849.01 Silicone Aluminum reduced 50% with No. 1 Thinner, in a full wet tack coat to reduce any pinholing or bubbling. This coat will be rapidly absorbed by the porous zinc film, exhibiting negligible film depth. An 8 hour solvent release period must be allowed. Follow with a second coat reduced 1/2 to 1 pint No. 1 Thinner at 1.0-1.5 mils DFT. Cure at operating temperature for 4 hours or resume continuous operations.

**Recoating old 849.01 Finishes:** For maximum life of the coating, old finishes must be sandblasted as described in the Surface Preparation section. Recoating high heat finishes may lead to early coating failure or delamination. If old finishes must be recoated, ensure that it is tightly adhering film, and it must be sanded, cleaned and then treated with 850-01 Rust-Sol to promote intercoat adhesion (refer to TDS for 850-01 for proper use). Prime or double coat bare areas as needed. Apply a minimal film thickness of 849.01 to avoid delamination.

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**RESISTANCE GUIDE:** Heat Tolerance with 859.06: EXTERIOR: 850°F, INTERIOR: 1000 °F. When used with inorganic zinc rich primer the system provides excellent protection for surfaces with medium operational temperatures in mild to severe atmospheric conditions. Inorganic zinc rich primer is also recommended for priming hot surfaces which operate intermittently. Heat Tolerance with 809.01: 1200 °F. The use of 809.01 Silicone Zinc Rich Primer will provide higher temperature resistance.

**Caution:** Until it is fully cured, this coating will be dry to touch at room temperature, but it will remain thermoplastic (soft to touch and susceptible to damage when scraped) at 150°F-500°F (Refer to Drying Time). Do not use if the temperature will not reach the full cure schedule – consult a Wilko representative for advice on the type of coating to use in your specific application.

**FIRST AID:** If inhaled, remove to fresh air. If not breathing, administer artificial respiration. In case of any contact with eyes, flush with plenty of water for 15 minutes and secure medical attention.

**PRECAUTION:** Not intended for general consumer use. Check with local EPA Office for VOC requirements before using this product. This product is flammable and can cause skin and eye irritations. Keep away from sparks, heat and open flames. Avoid contact with eyes, skin and clothing. Use with adequate ventilation and avoid prolonged breathing of vapors. Wear an air-supplied mask to avoid breathing concentrated vapors in enclosed areas. Keep the container closed. For additional safety information, refer to Material Safety Data Sheets.