



# WILKO PAINT, Inc.

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MANUFACTURERS OF THE FINEST INDUSTRIAL FINISHES

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## MODIFIED SILICONE WHITE WILKO NO. 821.02

**PRODUCT DESCRIPTION:** No.821.02 Modified Silicone White is a single package topcoat with excellent resistance in mild to severe weather exposures - providing outstanding gloss and color retention

**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 500°F are required.

**GENERIC TYPE:** Acrylic-Silicone

**COLOR:** White

**FINISH:** Gloss

**COMPONENTS:** One

**WEIGHT PER GALLON:** 9.9 +. 5 lbs

**VOC:** 4.62 lbs /gal

**SOLIDS BY VOLUME:** 37.3 ± 2.0%

**COVERAGE:** @ 1 mil DFT  
*Theoretical* - 598 sq. ft./gal.  
*Practical* - 479 sq. ft./gal.

**RECOMMENDED THICKNESS PER COAT:** 2 mils

**NUMBER OF COATS:** 1 to 2 recommended

**TEMPERATURE RESISTANCE:** Dry 500°F continuous, 550 °F intermittent. Coating will remain thermoplastic for a period of time, especially at temperatures between 150 °F and 400°F. See below for curing times.

**DRYING TIME** To Touch: 15-20 minutes  
To Handle: 30-40 minutes

Full cure will occur after exposure to high temperature. (2-4 hours at 400-450°F). Also read Resistance Guide.

**FLASH POINT:** 45° F TCC

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

**REDUCTION:** Below 85 °F: Use Wilko No. 13  
Above 85 °F: Use Wilko No.100

Do not thin with more than 54 ounces of thinner per gallon of paint to keep VOC below the AIM limit of 5.4#/gal for high temperature coatings. Check local VOC restrictions before using this product.

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

**RECOMMENDED SUBSTRATE:** Steel

**RECOMMENDED PRIMERS:** Material may be applied directly to properly cleaned metal. For enhanced corrosion resistance use Wilko No. 859-06 or 809-01 Primer Inorganic Zinc Rich. Do not use organic primers for high temperature applications.

### **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:** Surface must be clean and dry, free of oil, grease, wax or other contaminants. The use of chemical cleaning or pretreatment (e.g., phosphatizing) will help improve adhesion and enhance overall properties of the coating, and is recommended if no loose paint, mill scale or rust is present and sandblasting is not feasible.

When coating newly fabricated steel, or if heavy mill scale, loose paint, or rust is present, clean parts by mechanical means. All sharp edges must be rounded and weld splatter removed before cleaning. Hand, power tool, or SP7 or SP10 Blast Cleaning will not afford adequate protection. For the maximum protection of steel surfaces, dry abrasive blast to a White Blast Finish to meet SSPC-SP5. Apply primer prior to the development of any surface rust

### **EQUIPMENT REQUIRED:**

#### **Conventional Spray:**

This coating may be spray applied without thing. Use No.13 Thinner if additional thinning is desired, or use No.100 to avoid dry overspray. No special gun setup is needed to apply this product. Most suction or pressure fed gun intended for applying low viscosity coating will work for this application. Examples are Binks Model 62 , 2001 or 2100 Gun with a fluid tip of 63 - 66 and air cap of 63PR for pressure fed, to 66SK for siphon fed, guns. For pressure fed setup, regulate the tank pressure at 5-10 psi. Atomization pressure should be maintained at 45-75 psi.

Following is an example of a typical gun setup for a Binks 2100:

#### **Siphon Fed (Cup Gun):**

Fluid Nozzle: 66SS (0.070 Orifice), Part #45-6601

Air Nozzle: 66SD, Part #46-6020

Needle: #565, Part # 47-56500

Atomization Pressure: 40-60 psi

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**Equipment Required, conventional (cont'd)**

**Pressure Fed**

- Fluid Nozzle: 63CSS (0.052 Orifice) Part #45-6331
- Air Nozzle: 63PB, Part #46-6002
- Needle: 563A, Part #47-56310
- Pot Pressure: 5-10 psi
- Atomization pressure: 40-60 psi.

**Airless Spray:**

1. Airless spray equipment with pump ratio of 28:1 or 30:1.
2. Airless 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 and optimum cosmetic value. For conventional or airless spray application, use a light material nozzle set-up. Allow 2-hour solvent release following each coat. Apply heat at operating temperature (350°+) for at least 4 hours for complete cure.

**Topcoating Inorganic Zinc:** The primer must exhibit full cure. Refer to product data, No. 859-06. Apply 1 coat No. 821.02 Acrylic Modified 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 should 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 821.02 Finishes:** For maximum life of the coating, old finishes must be sandblasted as described in the *Surface Preparation* section. If old finishes must be recoated, ensure that it is tightly adhering film, and it must be sanded, cleaned and then wiped with N.104 Prep Sol or MEK to promote intercoat adhesion. Apply a minimal film thickness to avoid delamination.

**RESISTANCE GUIDE:**

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. **Caution:** Until it is fully cured for 2-4 hours at 400-450°F, this coating may be dry to touch at room temperature, but it will remain thermoplastic (soft to touch and susceptible to damage when scraped) at 150°F or higher temperature (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. Secure medical attention in all incidence of exposure.

**PRECAUTION:** Not intended for general consumer use. 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.

**For Technical Information call:**

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