

MANUFACTURERS OF THE FINEST INDUSTRIAL FINISHES

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SILICONE BLACK WILKO NO. 846.01

PRODUCT DESCRIPTION: No. 846.01 Silicone Black is a one package, ready mixed silicone coating designed for high temperature service up to 1000°F.

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 1000°F are required.

GENERIC TYPE:	Silicone
COLOR:	Black
FINISH:	Gloss
COMPONENTS:	One
WEIGHT PER GALLON:	$10.2 \pm .5$ lbs
VOC:	4.2 lbs
SOLIDS BY VOLUME:	$41.8 \pm 2.0\%$
COVERAGE: @1 mil DFT	Theoretical - 670 sq. ft./gal. Practical - 536 sq. ft./gal.

RECOMMENDED THICKNESS PER COAT:

1.5 mils (1000°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 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.

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.

RECOMMENDED SUBSTRATE:

Steel

RECOMMENDED THINNER: No.1, No. 13 or Retarder No. 100

REDUCTION: This coating is supplied ready-to-spray. It may be thinned as needed up for workability, but do not use more than 25% to avoid settling. Use No. 1 or No, 13 for temperatures below 85 °F and use No.13 or No.8 for temperatures above 85°F. AIM RULE: Do not use more than 48 oz of thinner per gallon of 846.01 to keep VOC level below the AIM limit of 5.4#/gal for high temperature coatings.

CLEAN UP THINNER:

No. 13 or MEK

EQUIPMENT REQUIRED:

Conventional Spray:

This coating may be spray applied without thing. Use No.13 Thinner if additional thinning is desired. 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 **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: 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. Use brush or spray small areas only or if spray application is not feasible. Spray application is preferred for production of film depth consistency & optimum cosmetic value. Apply a uniform coat, allowing 2hour 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. *Continued on page 2*

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Topcoating Inorganic Zinc: The primer must exhibit full cure. Refer to product data, No. 859-06. Apply 1 coat No. 846.01 Silicone Black 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 846.01 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 degreased or chemically cleaned to promote intercoat adhesion. Prime bare areas with 809-01 or coat it with 846.01 before recoating the whole structure. Apply a minimal film thickness of 846.01 to avoid delamination.

RESISTANCE GUIDE: Heat Tolerance: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. *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 advise 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.

09/13/13