

Rekosil MAT 680 uses specially selected raw materials, showing excellent resistance to heat. This is a silicone topcoating that cures at room temperature for handling, transportation, and storage.

#### TECHNICAL CHARACTERISTICS

##### TYPE

One component silicone topcoat.

##### USAGE

Recommended as coating for metal structures and equipment that operate at continuous temperatures of up to 500°C, or peak temperatures of 600°C for the Aluminum version, such as exterior of stoves, chimneys, boilers, etc. For Black version check Important Recommendations 3 and 4.

#### TECHNICAL INFORMATIONS

|                                   |                                |                          |
|-----------------------------------|--------------------------------|--------------------------|
| <b>COLOR</b>                      | Aluminum and Black             |                          |
| <b>FINISH</b>                     | Semiglossy                     |                          |
| <b>VOLUME SOLIDS</b>              | 34% ± 2                        | According to ISO 3233    |
| <b>WEIGHT PER LITER</b>           | 1,090 ± 0,05 g/ml              | According to ASTM D 1475 |
| <b>FLASH POINT</b>                | 26°C                           |                          |
| <b>THEORETICAL SPREADING RATE</b> | 17,0 m <sup>2</sup> /l - 20 µm |                          |
| <b>WET THICKNESS</b>              | 59 µm                          |                          |
| <b>DRY THICKNESS</b>              | 20 µm                          |                          |
| <b>DRYING TIME, for 20 µm</b>     | 25°C                           |                          |

|               | Minimum | Maximum |
|---------------|---------|---------|
| <b>Touch</b>  |         | 1 h     |
| <b>Handle</b> |         | 2 h     |
| <b>Recoat</b> | 24 h    | 48 h    |

|                                |                          |   |
|--------------------------------|--------------------------|---|
| <b>ENVIROMENTAL CONDITIONS</b> | <b>Temperature</b>       | Should be between 0 to 40°C                         |
|                                | <b>Relative Humidity</b> | Between 30 to 85%                                   |
|                                | <b>Dew Point</b>         | Surface temperature is at least 3°C above dew point |
|                                | <b>Thinner</b>           | 499.0000  |

|                    |                               |   |
|--------------------|-------------------------------|---|
| <b>APPLICATION</b> | <b>Brush</b>                  | It is not necessary dilution. This method must be used only for retouch and backing of welding cords and corners.   |
|                    | <b>Roller</b>                 | Dilute up to 10% (vol.) with recommended thinner. Must be used solvent resistant roller (sheep wool). The wool must be cutted (small size) to avoid blistering during the application.  |
|                    | <b>Conventional Spray Gun</b> | Dilute up to 10% (vol.) with recommended thinner. Conventional DeVilbiss JGA 503 FX 704 spray gun or similar. Spray pressure between 2,5 to 3,0 kgf/cm <sup>2</sup> (35 to 42 psi). Tank pressure between 0,5 to 1,5 kgf/cm <sup>2</sup> (7 to 21 psi). |
|                    | <b>AirLess Spray Gun</b>      | Dilute up to 10% (vol.) with recommended thinner. Use nozzles between 19 to 25 and pump pressure between 140 to 175 kgf/cm <sup>2</sup> (2000 to 2500 psi).   |



**SURFACE PREPARATION**

|                                 |   |
|---------------------------------|---|
| <b>Direct over carbon steel</b> | Blast cleaning ISO 8501-1 Sa 2 ½ (minimum). If there are areas where abrasive blasting is not possible, mechanical treatment similar to St 3 degree, according to ISO 8501-1, is acceptable. In those cases, we strongly recommend the use of equipment that produces a rough, not polished surface. If there is zinc silicate primer, the surface shall be cleaned with nylon brush and water to remove all zinc corrosion residues. The surface must be dry, free of contaminants such as salt deposits, oil, grease, fat, dust and other kind of contaminants. |
| <b>Recommended Primers</b>      | Rezinc EPD 597 (597.0939). For other primers, please contact our Consultants.   |
| <b>Coated Surfaces</b>          | The surface must be clean and free of contaminants as oils, fat, grease and dust. Must not present peeling's areas. Proceed light sanding (220) to break the gloss.   |
| <b>Recommended TopCoat</b>      | Not applicable  |

|                      |           |
|----------------------|-----------|
| <b>SHELF LIFE</b>    | 12 months |
| <b>UN NUMBER</b>     | 1263      |
| <b>HAZARD NUMBER</b> | 33        |

**IMPORTANT RECOMMENDATIONS**

1. The practical spreading rate of the product varies according to the applied thickness, application method and techniques, type and rugosity of the surface and ambient conditions.
2. The weight/l, viscosity and drying values were obtained in laboratory at a temperature of 25°C. At an altered temperature, the results might be different from the specified ones.
3. May occur gloss and color changes in Black version when the temperature is above 160°C.
4. The Black version resists temperatures of up to 250°C and peak temperatures of 300°C.
5. When applied by brush or roller aluminum pigmented paints may present a different visual effect due to the aluminum uneven distribution.
6. Excessive thickness may result in bubbles when the paint is exposed to high temperatures.
7. Pot life is shortened by higher temperature.
8. For better anticorrosive performance, apply over zinc silicate primer.

**SAFETY PRECAUTIONS**

1. Improper use and handling of this product can be hazardous to health and cause fire or explosion. Do not use it without first taking all appropriate measures to prevent property damage and injuries.
2. Storage: keep the product in sheltered, well-ventilated areas. Maximum temperature: 40° C. Must not be directly exposed to the sun.
3. Flammable: flammable product, which must be kept distant from ignition sources, and do not smoke nearby.
4. Inhalation: Avoid breathing vapors, keeping proper ventilation during application and drying.
5. Handling: wear proper protective clothing and masks, goggles, etc. Do not eat or drink nor allow children and animals to be near the application area.



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**HEALTH HAZARDS**

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1. Skin contact: wash affected area thoroughly with neutral soap.
  2. Clothing contact: remove clothing and wash it.
  3. Leakage: Isolate the area, and do not smoke nearby. If large quantity leaked in confined area, wear protective masks. Do not inhale vapors. Stop leakage with sand, sawdust or soil, and transfer liquid and solid to separated recipients for disposal.
  4. Fire: protect non-affected recipients with water spray. Extinguish fire using carbon dioxide, foam or dry chemical.
  5. Eyes contact: flush eyes with large amounts of clean water for at least 10 minutes, and get medical attention immediately.
- IMPORTANT**: For further information consult the product MSDS (Material Safety Data Sheet).
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