

DELTA Prime 2K SD

TWO COMPONENT SOLVENT DRIVEN POLYURETHANE PRIMER

| | | | | | |
|--|--|--|--|------------------|---------------------|
| MATERIAL TYPE | 2K Polyurethane tie coat for ferrous and non-ferrous substrates | | | | |
| RECOMMENDED USE | As a primer for use over aluminum, galvanized steel, mild steel, stainless steel and other non-ferrous surfaces. As an inter-coat primer over DELTA's range of elastomeric coatings. | | | | |
| Endorsements | 1998 COMPLIANT – 1990 EPA - PG6/23(92) Clause 19(d) Appendix 2. | | | | |
| RECOMMENDED APPLICATION METHODS | Brush Roller, Airless | | | | |
| COLOUR AVAILABILITY | Grey, red, oxide, white | | | | |
| FLASH POINT | Base: 31 °C | | Additive: 28 °C | | |
| SOLIDS BY VOLUME | 44 ± 2% (ASTM-D2697-91). | | | | |
| V.O.C. | 515* grams/litre * 1990 EPA - PG6/23(97) modified Appendix 3. | | | | |
| TYPICAL THICKNESS | Dry film thickness 50 microns | Wet film thickness 114 microns | Theoretical coverage 8.8 m ² /liter | | |
| PRACTICAL APPLICATION RATES - microns per coat | | Brush | Roller | Airless | Conventional |
| | Dry | 40 | 35 | 50 | 50 |
| | Wet | 91 | 80 | 114 | 114 |
| AVERAGE DRYING TIMES @ | 15 °C | 23 °C | | 35 °C | |
| | To touch | 3 hours | 2 hours | 1 hour | |
| | To recoat | 16 hours | 14 hours | 12 hours | |
| | To handle | 24 hours | 16 hours | 14 hours | |
| <i>Figures are given as a guide only. Factors such as air movement and humidity must also be considered.</i> | | | | | |
| RECOMMENDED THINNER | MEK | | | | |
| RESISTANCE TO | Moisture | Excellent | Aliphatic solvents | Excellent | |
| | Acid spillage | Moderate | Abrasion | Excellent | |
| | Alkali spillage | Moderate | | | |
| | Petroleum solvents | Excellent | | | |
| RECOMMENDED TOPCOATS | May be overcoated with any of DELTA's range of products as well as other high-performance epoxies and polyurea systems, provided that the surfaces to be coated have been suitably cleaned. To achieve optimum adhesion, overcoating must be undertaken within 4 days | | | | |
| POT LIFE | 15 °C | 23 °C | | 35 °C | |
| (For notes on tropical application see page 2) | 3 hours | 2 hours | | 1 hour | |
| PACKAGE | two-components supplied in separate containers to be mixed prior to use. | | | | |



| | |
|---------------------|---|
| Pack Size | 5 kg when mixed. |
| Mixing Ratio | 5 parts base to 3 parts additive by volume. |
| Weight | 1,34 kg/liter. |
| Shelf Life | Minimum 1 year |

SURFACE PREPARATION:

Blast clean to Sa 2½ BS 7079: Part A1: 1989 (ISO 8501-1: 1988). Average surface profile in the range 30-50 µm. Manually prepared surfaces should be to a minimum standard of St 3 BS 7079: Part A1: 1989 at the time of coating. Ensure surfaces to be coated are dry and free from all traces of surface contaminants.

For application onto stainless steel substrates, the surface should be degreased and where ever practical, blast cleaned to Sa 2½ BS 7079: Part A1: 1989 (ISO 8501-1: 1988).

For application onto cold rolled steel and non-ferrous metals such as galvanized surfaces, degreasing should be undertaken using an emulsifying agent. For optimum adhesion, abrading is recommended.

APPLICATION EQUIPMENT:

Airless Spray

| | |
|---------------------|---------------------------------|
| Nozzle Size: | 0.33-0.38mm (13-15 thou) |
| Fan Angle: | 40 ° |
| Operating Pressure: | 155kg/cm ² (2200psi) |

The airless spray details given above are intended as a guide only. Fluid hose length and diameter, paint temperature and project complexity all have an effect on the choice of spray tip and operating pressure. The operating pressure should be the lowest possible consistent with satisfactory atomization.

As conditions vary, it is the applicators' responsibility to ensure that the equipment in use has been adjusted to give optimum performance. In case of any difficulties or queries, please contact DELTA Regional Technical Centre.

Conventional Spray

| | |
|---------------------|---|
| Nozzle Size: | 1.52mm (60 thou) |
| Atomizing Pressure: | 3.2kg/cm ² (50 psi) |
| Fluid Pressure: | 0.35 – 0.7kg/cm ² (5 - 10 psi) |

The conventional spray details given above are intended as a guide only. It may be found that in some circumstances, slight variations in atomizing pressure, fluid pressure and alteration of tip arrangements may provide optimum atomization.

Brush and Roller

The material is suitable for brush and roller application.

Application of more than one coat may be required to give the equivalent dry film thickness to one spray applied coat.

APPLICATION CONDITIONS AND OVERCOATING:

In conditions of high relative humidity, i.e. 80-85% good ventilation is essential.

Substrate temperature should be at least 3 °C above the dew point.

At application temperatures below 10 °C, drying times will be significantly extended and spraying characteristics may be impaired.

Application at temperatures below 5 °C is not recommended.

In order to achieve optimum water and chemical resistance the temperature needs to be maintained above 10°C whilst curing.

For application at elevated temperatures, please see the note below.

To overcoat outside the times stated on the data sheet, please seek the advice of DELTA's Regional Technical Centre.

ADDITIONAL NOTES:

- Drying, curing and pot life times should be considered as a guide only.
- The curing reaction of this product commences immediately the two components are mixed.
- Due to the reaction being temperature dependent, the curing and pot life will be approximately halved by a 10 °C increase in temperature and doubled by a 10 °C decrease in temperature.

Tropical Use

To ensure a satisfactory working pot life, the temperature of **DELTA Prime 2K SD** should not exceed 35°C at the time of mixing. Thinning the mixed product at any stage will not significantly extend the working pot life.

Application outside the working pot life, even if the material appears to be fit for use, may result in inferior adhesion properties. The recommended maximum air and substrate temperature for the application of this product is 45°C, providing that the conditions allow for satisfactory application and film formation.

If the air and substrate temperatures exceed 45°C during application, paint film defects such as dry spray, bubbling and pin holing etc. may occur. Numerical values quoted for physical data may vary slightly on individual batches.

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own investigations and testing, the suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. These products require specialized equipment and skills to apply. It is the purchaser's responsibility to ensure that they have the necessary equipment, skills and experience to apply these products. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Technical and application information is provided for the purpose of establishing a general profile of the material and application parameters. Test performance results were obtained in a controlled environment and DELTA Coatings International LLC makes no claim that these tests or any other tests can be accurately reproduced in all environments.

The rights of the purchaser regarding the quality of our materials follows completely our general terms and conditions. For requirements, which exceed the scope of the above-mentioned applications please contact DELTA technical staff.

DELTA Coatings International LLC reserves the right to change or modify the details and data contained herein at any time.

Valid is only the actual version of this technical data sheet in each case.

* DELTA recommends that in all applications involving chemicals a pre-test of the lining's suitability in the customer's application is conducted. Consult with DELTA Technical Team.

© Copyright, DELTA Coatings International LLC, DELTA Prime 2K SD

Version: October 2019-001