**Skykote K1 Series** Gloss Colors High Solid Polyurethane Topcoat



| Product        | Skykote K1 Series Polyurethane Topcoat - Gloss Colors  |
|----------------|--|
| Item Class     | High Solid Polyurethane Topcoat  |
|                | Skykote K1 Series is a two-component impact resistant polyurethane topcoat which provides high gloss and superior D.O.I. Skykote has been formulated to resist hydraulic fluids and many other chemicals. It offers excellent color and gloss retention.   |
| Specifications | Product is manufactured to meet the performance requirements of the following specifications:  |
|                | 58465/47 - AER-M-P.039 - AIMS 04-04-003 - AIMS 04-04-012 - ASN B77601 -<br>BAEP 3529 - BAEP 3538 - BAEP 3540 - BAEP 3545 - BAEP 3546 - BS 2660 - BSX34<br>Ty B - DMS 2143,TY I, CL I, Comp C - DPS 4.50-187 - I.C. TO-37.05 - IFC 30-117-03<br>- OS 00 CD2 007 004 - PQ 10050 H - 004 - PQ 10050 H - 027 - PQ 10050 H - 075<br>- SMI 70068 - SMI 70070 - SMI 70089.1 - STD 175438 - TH 33.0150 Ty 1, Cl B - TH<br>5.721/1 - TH 5.721/5 - TH 5.721/6 - TN A.007.10012 G - TN A.007.10113 I Gr A -<br>TN A.007.10158 - VV0605-51 - Z-12.380/AIMS 04-04-003 - Z-12.380/AIMS 04-04-<br>012 |

\*Please check 3chem.com for complete specification list

| Catalyst & Additives | Catalyst/Activator  | Thinner                                       | Additiv              | e   |
|----------------------|---|---|----------------------|---|
|                      | 321   | CS34 (High Temperatu                          | res) PS40 Accele     | rator   |
|                      |   | CM100 (Normal Condi                           | tions) CRL25 Rollin  | g/Brushing  |
|                      |   | CF3 (Low Temperature                          | es) CRL28 Rollin     | g/Brushing High Temperatures  |
|                      |   |   | HF12 High H          | umidity Additive  |
|                      | *AVAILABLE IN VARIO   | DUS KIT SIZES                                 |                      | i de la companya de l |
| Use of Primers       |   | r local 3Chem represe<br>ed with this system. | entative for a compl | ete list of epoxy primers   |
| Surface Preparation  | Prepare substrate per OEM requirements. Refer to Glair application guide for detailed instructions or contact your local 3Chem representative for assistance. |   |                      |   |
| Mixing Instructions  | Base  | Catalyst/Activator                            | Thinner              | Mix Ratio   |

| Mixing Instructions | Base             | Catalyst/Activator | Thinner         | Mix Ratio     |
|---------------------|------------------|--------------------|-----------------|---------------|
|                     | K11-XXXX (Gloss) | 321                | See Chart Below | 1:1:.20 (Max) |

Shake (Base) for 15 minutes to assure no solid settlement remains in can. Add component B catalyst to component A paint first. Then add optional thinner reducer from chart below. Refer to thinner option chart below for detailed mixing information. Mix ratio for material is 1-part component A paint, 1-part component B catalyst and between .10 to .20 parts thinner (or 5 to 10% by volume) depending on environmental conditions and applicator preference. Opaque colors such as whites and grays will typically require more thinner while less opaque colors such as reds and yellows will require less. Kit including thinner should yield either a maximum of 2.20 gallons or

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2.20 quarts. Product viscosity is contingent on environmental conditions. Therefore, check material viscosity to determine exact percentage of thinner to be added while staying within the recommended ranges.

- **Induction Time** Although no induction time is needed. Once mixed together, ensure that admixed material is continuously stirred for at least 5 minutes before proceeding.
- **Spraying Viscosity** 17-19 Seconds with #2 Zahn cup (Once thinner is added)

Pot Life 7 Hours @ 21° Celsius, 70° Fahrenheit (Higher temperatures will shorten pot life)

*Film Thickness* 2-3 Mils DFT (2 Coats @ 1-1.5 DFT) Wet film thickness should be 4-6 Mils total between 2 coats

#### **Application Instructions**

| Temperature and Humidity | Minimum | Maximum |  |
|--------------------------|---------|---------|--|
| Temperature Celsius      | 11°     | 35°     |  |
| Temperature Fahrenheit   | 52°     | 95°     |  |
| Humidity                 | 33%     | 74%     |  |

\*\*For Humidity above 74%, use HF12 Additive. Max recommended relative humidity at application is 90%.

HF12 high humidity additive should be added to admix material (paint, activator, thinner) at a rate of 2% max by volume.

| Spray | Equipment |
|-------|-----------|
|-------|-----------|

| Spray Gun Type                   | Tip/Nozzle Size | Air Pressure  | Pot Pressure    |
|----------------------------------|-----------------|---------------|-----------------|
| Conventional Air                 | 1.3 - 1.6 mm    | 40 to 60 psi  | 10 to 20 psi    |
| HVLP                             | 1.4 - 1.6mm     | 10 psi at cap | 10 to 20 psi    |
| Air Electrostatic                | 1.2 - 1.5mm     | 45 to 60 psi  | 10 to 40 psi    |
| Air Assist Airless Electrostatic | .2334 mm        | 40 to 60 psi  | 700 to 1200 psi |

#### Dry Times: \*\*\*Thinner Options for Gloss Colors Only

| Temperature        | Thinner | Wet-Edge | Time Between Coats | Dry to Tape | Dry to Handle | Full Cure |
|--------------------|---------|----------|--------------------|-------------|---------------|-----------|
| 52-65°F (11-18°C)  | CF3     | 40 Min   | 1-1.5 Hours        | 7-8 Hours   | 10 Hours      | 6 Days    |
| 66-93°F (19-34°C)  | CM100   | 35 Min   | 45-60 Min          | 6-7 Hours   | 8-9 Hours     | 6 Days    |
| 94-100°F (35-38°C) | CS34    | 30 Min   | 30-40 Min          | 5-7 Hours   | 7-8 Hours     | 6 Days    |

Only mix enough material to be applied on initial coat. Always add component B catalyst to component A paint then add recommended thinner reducer based on environmental condition. Refer to thinner option chart above. Complete kit of material will yield a maximum of 2.20 US Gallons (8.3 liters). 1-gallon component A paint, 1-gallon component B catalyst, 1 quart thinner (25 US oz. / 740 ml).

Always check product viscosity using #2 Zahn cup to confirm exact amount of thinner required to achieve recommended application viscosity. Recommended thinning range is between 5% and 10%.

Apply one tack coat of material using a uniform spray pattern. Wait recommend time between coats based on chart above. Initial coat should be tacky before applying second coat. Applying second coat too early will lead to possible running of material. Waiting too long will lead to a dull finish. Mix enough material to be applied on second coat. Use same mixing instruction from initial coat above.

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Apply a second medium wet coat using a uniform spray pattern. Second coat must appear wet and uniform once complete. Take care not to leave any dry areas or spots. Wet these areas, if necessary, to assure a uniform finish. Wait appropriate dry to tape or dry to handle time based on chart above.

Application Instructions PS40 Accelerator (Fast dry additive mix options)

| PS40 Accelerator | Dry Between Coats | Dry to Handle | Dry Hard | Pot Life   | Full Cure |
|------------------|-------------------|---------------|----------|------------|-----------|
| .5% By Volume    | 12 Minutes        | 2 Hours       | 4 Hours  | 4 Hours    | 6 Days    |
| 1% By Volume     | 10 Minutes        | 1.5 Hours     | 3 Hours  | 3 Hours    | 6 Days    |
| 1.5% By Volume   | 5 Minutes         | 45 Minutes    | 1 Hour   | 45 Minutes | 6 Days    |

\*Note: Overuse of PS40 additive may affect product gloss and finish

**Force Cure**: If deemed necessary oven curing is possible to reduce dry to tape and handle times. After application, allow coating to air dry for 1 hour at room temperature (75° F), then force cure for 2 hours at 120° F.

| Theoretical Coverage                    | 800-900 sq. ft / gallon @ 1 mil 20-22m2 / liter @1 mil<br>*Coverage based on 100% transfer efficiency rate                           |  |  |
|---|--|--|--|
| Dry Film Weight                         | Per 25 microns: 27-35 g/m2<br>Per dry mil: .00570082 lbs./ft2  |  |  |
| Color                                   | Available in all color ranges  |  |  |
| Gloss                                   | Gloss colors: 90 minimum @ 60 degrees  |  |  |
| Volatile Organic Compound 340 – 390 g/l |  |  |  |
| Shelf Life                              | 24 Months (When stored in climate-controlled environment between 60-80° F)<br>*Product may be re-certified upon inspection by 3Chem. |  |  |
| Safety Instructions                     | Always read material safety data sheet (SDS) and product label before utilizing this product. Product SDS is available upon request. |  |  |

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