DESCRIPTION

2K Urethane Chip Guard is a job-sized, two-component, shake-and-shoot, textured coating for reproducing a variety of OE textures and chip guards. Two-component systems help eliminate common problems seen with one-component products such as long flash times, pinholes, solvent trap, delamination and solubility.

FEATURES

- OEM recommended
- 2K durability with 1K convenience
- Reproduces fine to coarse and light to heavy OE textures
- Builds heavy textures without trapping solvent
- No flash time required between coats
- 50 state compliant
- Pinhole free
- Easy to use shake-and-shoot system
- R.O. billable unit
- 16 defined textures with detailed instructions
- Non-yellowing and non-staining
- Tintable, paintable or can be used as a textured top coat
- Impact and chemical resistant
- Excellent for sound dampening

SUITABLE SUBSTRATES

PROPERLY PREPARED (SEE PREPARATION SECTION)

- Steel
- Aluminum
- Galvanized steel
- Existing OEM paint
- Polyester fillers
- E-coat
- Fiberglass
- SMC and FRP
- Epoxy primer
- 2K urethane primer and sealer

TYPICAL PROPERTIES

<table>
<thead>
<tr>
<th>Part:</th>
<th>Product Name:</th>
<th>Color:</th>
<th>Container:</th>
</tr>
</thead>
<tbody>
<tr>
<td>52000</td>
<td>2K Urethane Chip Guard</td>
<td>Opaque Gray</td>
<td>Kit</td>
</tr>
</tbody>
</table>

Kit Contains: 1 8 oz. filled pint bottle containing 2K Urethane Chip Guard material

Solvent Resistance: 100MEK double rubs (ASTM D 5402)

RTS VOC: 1.63 #/gal maximum (196 g/L)
Check local VOC regulations to ensure compliance of all products in your area.

<table>
<thead>
<tr>
<th>Pot Life @ 70°F (21°C) and 50% R.H.</th>
<th>20 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Time:</td>
<td>0 – 20 minutes</td>
</tr>
<tr>
<td>Dust Free Time:</td>
<td>60 – 90 minutes</td>
</tr>
<tr>
<td>Paint Time:</td>
<td>20 minutes – 4 hours</td>
</tr>
</tbody>
</table>

Use VOC calculator to determine VOC of mixtures. Consult local regulatory for VOC compliance.

Always wear OSHA required (PPE) Personal Protection Equipment as outlined on the SDS and product label to ensure your safety.

**PREPARATION:**

**BARE METAL, ALUMINUM, GALVINIZED STEEL, POLYESTER FILLER, AND EXISTING OEM PAINT**

1. Clean with SEM Solve or XXX Universal Surface Cleaner.
3. Prime any bare metal and aluminum areas as per manufacturer's instructions.

**Note:** For best results, prime any exposed polyester filler with a urethane primer.

**FIBERGLASS, RIGID PLASTIC AND SMC**

1. Clean with SEM Solve or XXX Universal Surface Cleaner. Surface must be completely dry; avoid saturating panel with cleaner.
2. Sand the surface with P180 grit sandpaper, blow off dust and tack clean.

**Note:** For TPO, EPDM and PP use Plastic Adhesion Promoter or XXX Adhesion Promoter. For ABS, SMC and fiberglass no adhesion promoter is required. SEM does not recommend coating polyethylene with 2K Urethane Chip Guard.

**E-COAT**

1. Clean with SEM Solve or XXX Universal Surface Cleaner.
2. Scuff the surface with a coarse/red abrasive pad. Do not scuff through the e-coat.
3. Blow off dust and tack clean.

**MIXING:**

**2K Urethane Chip Guard** is a shake-and-shoot system, but can also be mixed by part, volume or ratio.

1. Refer to the below chart for appropriate mix ratios.
2. Shake bottle for two minutes just before applying.
**IMPORTANT:** Due to the short pot life of this product, only activate immediately before use.

2K Urethane Chip Guard

<table>
<thead>
<tr>
<th>Coating</th>
<th>Activator</th>
<th>Tint (optional)</th>
<th>Reducer (optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 bottle</td>
<td>1 bottle</td>
<td>1 oz.</td>
<td>Up to 15%</td>
</tr>
<tr>
<td>8 parts</td>
<td>4 parts</td>
<td>1 part</td>
<td>Up to 15%</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>10%</td>
<td>Up to 15%</td>
</tr>
</tbody>
</table>

**Note:** Adding Reducer can extend pot life.

**Optional:** Tinting is not required but is recommended. Matching 2K Urethane Chip Guard to the vehicle’s color makes painting easier and hides chips or damage that could occur after the repair.

**APPLICATION:**

**Note:** Due to the shorter pot life, applicator guns may require cleaning between coats if flash time is allowed, especially in hot and/or humid conditions. Use XXX Universal Gun Cleaner or VOC compliant solvent.

You can achieve numerous textures using different techniques. This TDS includes instructions to replicate 16 different textures. The chart below ranks each texture by coarseness (grain of texture) and film build (thickness of material on panel). Identify your desired texture and find the corresponding instructions on the following pages.
Check local VOC regulations to ensure compliance of all products in your area.

71103 2K URETHANE CHIP GUARD APPLICATOR

<table>
<thead>
<tr>
<th>Coats:</th>
<th>1 – 3 coats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Time between Coats:</td>
<td>0 – 20 minutes @ 70°F (21°C)</td>
</tr>
<tr>
<td>Air Pressure:</td>
<td>20 – 110 psi</td>
</tr>
</tbody>
</table>

**Note:** Adjust flash times as needed to produce desired texture. Multiple coats can be applied without flash time if needed.

**Note:** Always spray a test panel to ensure desired texture. Variations in temperature, air pressure, distance from substrate and applicator used will affect texture.

**TEXTURE 5**
- 80 – 110 psi
- 36” – 48” from panel
- 2 light coats
- See panel 5

**TEXTURE 13**
- 80 – 110 psi
- 24” from panel
- 2 heavy coats
- See panel 13

**TEXTURE 15**
- 20 – 50 psi
- 24” from panel
- 2 light coats
- See panel 15

**TEXTURE 16**
- 20 – 50 psi
- 24” from panel
- 2 heavy coats and a light drop coat after flash with 80 – 110 psi
- See panel 16
**HVLP GUN**

<table>
<thead>
<tr>
<th>Coats:</th>
<th>1 – 4 coats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Time between Coats:</td>
<td>0 – 20 minutes @ 70°F (21°C)</td>
</tr>
<tr>
<td>Air Pressure:</td>
<td>3 – 25 psi</td>
</tr>
</tbody>
</table>

**Note:** Adjust flash times as needed to produce desired texture. Multiple coats can be applied without flash time if needed.

**TEXTURE 1**
- 3.0 mm fluid tip
- 25 psi
- 10" from panel
- 1 medium coat
- See panel 1

**TEXTURE 2**
- 1.4 mm fluid tip
- 5 psi
- 10" from panel
- 2 light coats
- See panel 2

**TEXTURE 3**
- 1.8 mm fluid tip
- 5 psi
- 10" from panel
- 2 light coats
- See panel 3

**TEXTURE 4**
- 3.0 mm fluid tip
- 5 psi
- 10" from panel
- 1 light coat
- See panel 4

**TEXTURE 6**
- 1.8 mm fluid tip
- 20 psi
- 12" from panel
- 2 heavy coats back-to-back wet
- See panel 6
TEXTURE 7
- 1.4 mm fluid tip
- 5 psi
- 10" from panel
- 2 medium-heavy coats back-to-back wet
- See panel 7

TEXTURE 8
- 1.8 mm fluid tip
- 5 psi
- 8" from panel
- 2 medium-heavy coats back-to-back wet
- See panel 8

TEXTURE 9
- 1.8 mm fluid tip
- 5 psi
- Cone fan pattern
- 10" from panel
- Light coats to coverage
- See panel 9

TEXTURE 10
- 1.4 mm fluid tip
- 20 psi
- 12" from panel
- 2 medium-heavy coats back-to-back wet
- See panel 10

TEXTURE 11
- 3.0 mm fluid tip
- 25 psi
- 12" from panel
- 2 medium coats
- See panel 11

TEXTURE 12
- 3.0 mm fluid tip
- 5 psi
- 10" from panel
- 1 – 2 heavy coats
- See panel 12
TEXTURE 14
- 3.0 mm fluid tip
- 3 psi
- 8" from panel
- 1 light coat
- See panel 14

TOPCOATING:
2K Urethane Chip Guard can be topcoated with most paint systems. Follow top coat manufacturer’s instructions for proper procedure.

| Wet-on-wet top coat time: | 20 min – 4 hours without scuffing |
| Paint type:              | Solvent or waterborne              |

Note: If topcoating after 4 hours, 2K Urethane Chip Guard must be scuffed.

CLEAN UP:
Remove all masking tape while final coat is still wet. Use appropriate cleaning materials compliant with VOC regulations in your area.

STORAGE:
2K Urethane Chip Guard should be stored between 60 – 80°F (16 – 27°C). The shelf life for 2K Urethane Chip Guard is 3 years when stored under ideal conditions.

RELATED PRODUCTS

<table>
<thead>
<tr>
<th>Part</th>
<th>Product</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>38371</td>
<td>SEM Solve</td>
<td>Gallon</td>
</tr>
<tr>
<td>38373</td>
<td>SEM Solve</td>
<td>20 oz. Aerosol</td>
</tr>
<tr>
<td>38374</td>
<td>SEM Solve</td>
<td>Quart</td>
</tr>
<tr>
<td>38375</td>
<td>SEM Solve</td>
<td>5 Gallon</td>
</tr>
<tr>
<td>39861</td>
<td>Plastic Adhesion Promoter</td>
<td>Gallon</td>
</tr>
<tr>
<td>39863</td>
<td>Plastic Adhesion Promoter</td>
<td>20 oz. Aerosol</td>
</tr>
<tr>
<td>39864</td>
<td>Plastic Adhesion Promoter</td>
<td>Cone Quart</td>
</tr>
<tr>
<td>71103</td>
<td>2K Urethane Chip Guard Applicator</td>
<td>1 Each</td>
</tr>
<tr>
<td>77721</td>
<td>XXX Adhesion Promoter</td>
<td>Gallon</td>
</tr>
<tr>
<td>77723</td>
<td>XXX Adhesion Promoter</td>
<td>16 oz. Aerosol</td>
</tr>
<tr>
<td>77724</td>
<td>XXX Adhesion Promoter</td>
<td>Cone Quart</td>
</tr>
<tr>
<td>77763</td>
<td>XXX Universal Gun Cleaner</td>
<td>20 oz. Aerosol</td>
</tr>
</tbody>
</table>

Check local VOC regulations to ensure compliance of all products in your area.
Technical Consultation Service
Our Technical Staff is ready to assist you with any questions. You are invited to take advantage of our extensive experience, laboratory services and trained field service representatives. Call (800) 831-1122 for answers to your questions. Hours of operation are Monday through Thursday 8:00 am until 5:00 pm EST and on Friday 8:00 am until 4:30 pm EST.

Disclaimer:
The information supplied in this document is for guidance only and should not be construed as a warranty. All implied warranties are expressly disclaimed. All users of the materials are responsible for assuring that it is suitable for their needs, environment and use. All data subject to change as SEM deems appropriate. Users should review the Safety Data Sheet (SDS) and product label for the material to determine possible health hazards, appropriate engineering controls and precautions to be observed in using the material. Copies of the SDS and product label are available upon request.