



# 2K URETHANE CHIP GUARD

## TECHNICAL DATA SHEET



Check local VOC regulations to ensure compliance of all products in your area.

### 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 system helps 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 PREPPED (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

Part:	Product Name:	Color:	Container:
52000	2K Urethane Chip Guard	Opaque Gray	Kit

**Kit Contains:** 1 50% filled pint bottle containing **2K Urethane Chip Guard** material  
1 4 oz. **2K Urethane Chip Guard Catalyst**

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

**RTS VOC:** 1.63 #/gal maximum (196 g/L)



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

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**.
2. Sand the surface with P180 – P220 grit sandpaper. Blow off and tack clean.
3. Prime any bare metal and aluminum areas as per manufacturer's instructions.
4. Sand the primer with P180 – P220 grit sandpaper. Blow off and tack clean.

**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.



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**IMPORTANT: Due to the short pot life of this product, only activate immediately before use.**

2K Urethane Chip Guard	Coating	Activator	(after activation)	
			Tint (optional)	Reducer (optional)
Shake-and-shoot	1 bottle	1 bottle	1 oz.	Up to 15%
Mix by part	8 parts	4 parts	1 part	Up to 15%
Mix by volume/ratio	2	1	10%	Up to 15%

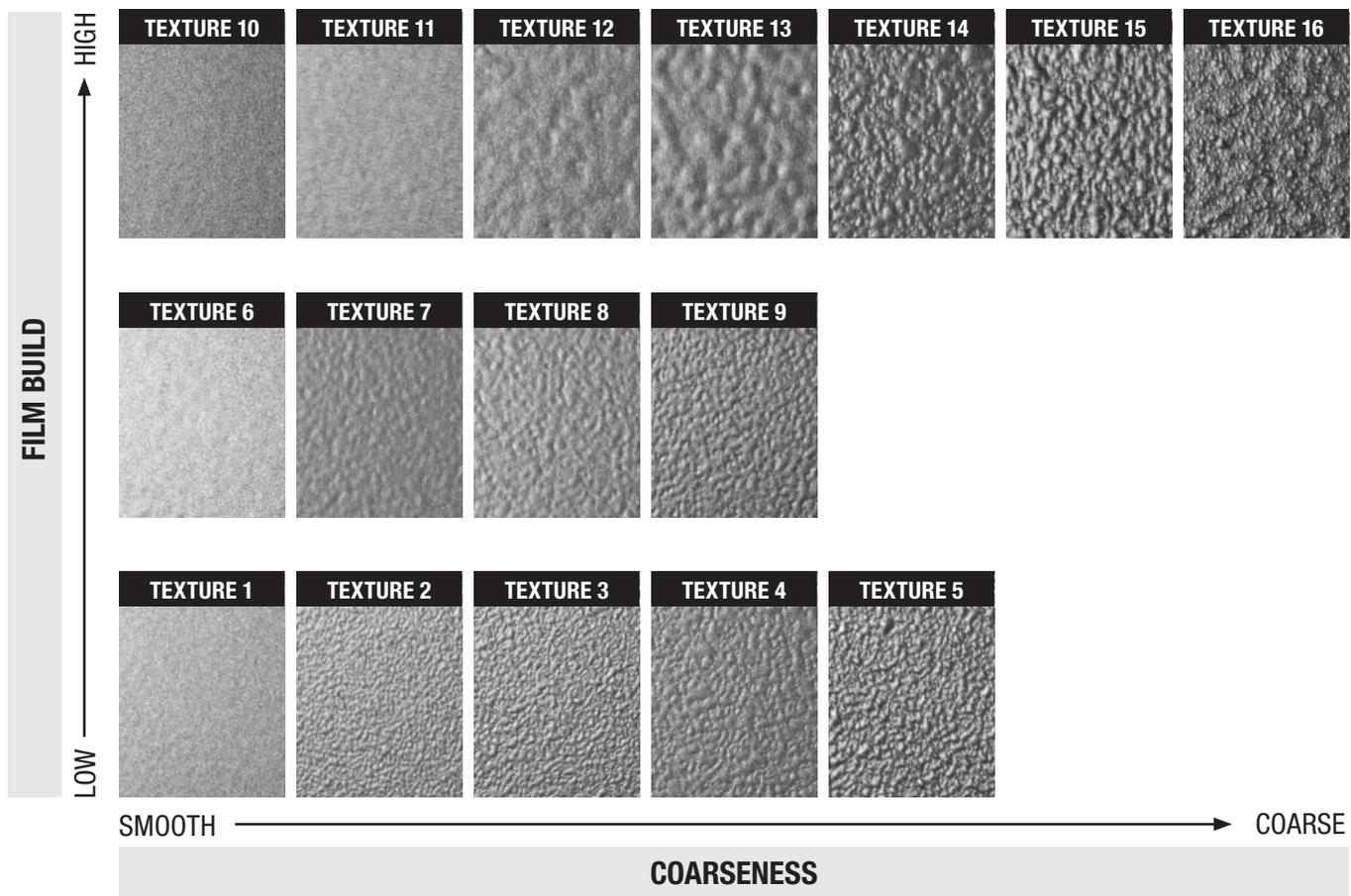
**Note:** Adding Reducer can extend pot life.

**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.





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## 71103 2K URETHANE CHIP GUARD APPLICATOR

**Coats:** 1 – 3 coats

**Flash Time between Coats:** 0 – 20 minutes @ 70°F (21°C)

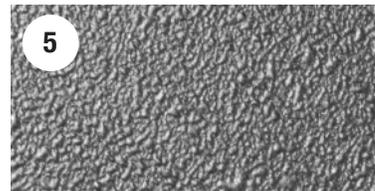
**Air Pressure:** 20 – 110 psi

**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.**

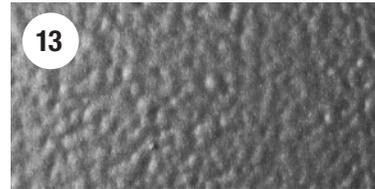
### TEXTURE 5

- 80 – 110 psi
- 36" – 48" from panel
- 2 light coats
- See panel 5



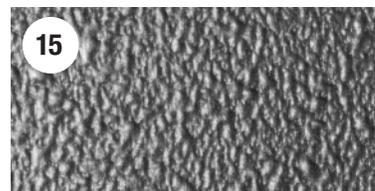
### TEXTURE 13

- 80 – 110 psi
- 24" from panel
- 2 heavy coats
- See panel 13



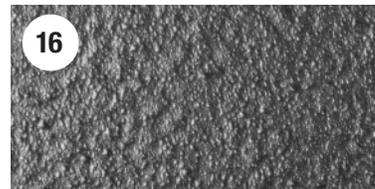
### TEXTURE 15

- 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





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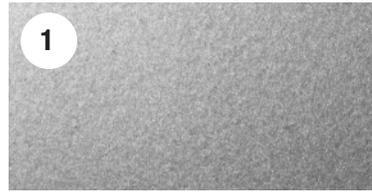
## HVLP GUN

<b>Coats:</b>	1 – 4 coats
<b>Flash Time between Coats:</b>	0 – 20 minutes @ 70°F (21°C)
<b>Air Pressure:</b>	3 – 25 psi
<b>Tip Size:</b>	1.4 – 3.0

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

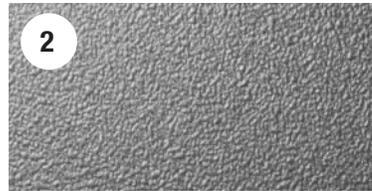
### TEXTURE 1

- 2.5 – 3.0 mm fluid tip
- 25 psi
- 10" from panel
- 1 medium coat
- See panel 1



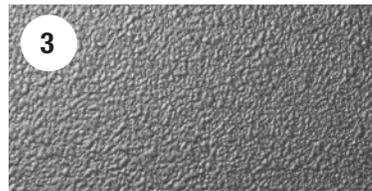
### TEXTURE 2

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



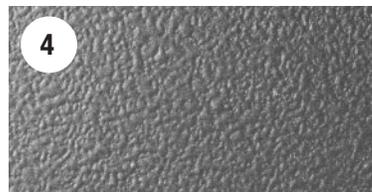
### TEXTURE 3

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



### TEXTURE 4

- 2.5 – 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

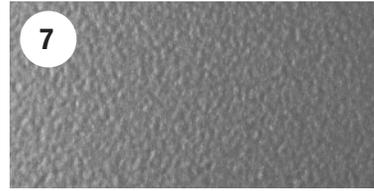




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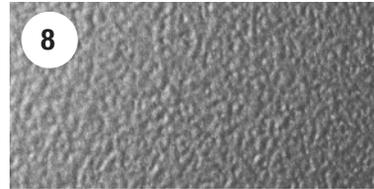
### TEXTURE 7

- 1.4 mm fluid tip
- 5 psi
- 10" from panel
- 2 medium-heavy coats back-to-back wet
- See panel 7



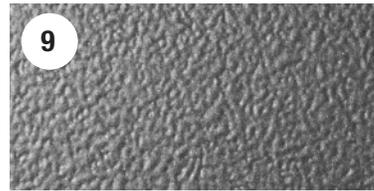
### TEXTURE 8

- 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



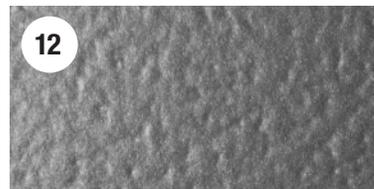
### TEXTURE 11

- 2.5 – 3.0 mm fluid tip
- 25 psi
- 12" from panel
- 2 medium coats
- See panel 11



### TEXTURE 12

- 2.5 – 3.0 mm fluid tip
- 5 psi
- 10" from panel
- 1 – 2 heavy coats
- See panel 12

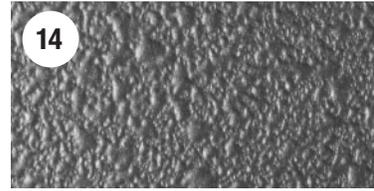




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## TEXTURE 14

- 2.5 – 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.

<b>Wet-on-wet top coat time:</b>	20 min – 4 hours without scuffing
<b>Paint type:</b>	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

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



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77771	XXX Universal Surface Cleaner	Gallon
77774	XXX Universal Surface Cleaner	Quart

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### 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.

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