



## TECHNICAL DATA SHEET & PROCESS GUIDE



### RAPTOR TRUCK BED LINER - TINTABLE

#### 2K PROTECTIVE URETHANE COATING

U-POL's RAPTOR Truck Bed Liner is a durable 2K polyurethane coating that provides surfaces with a protective barrier.

*RAPTOR Black Truck Bed Liner is also available.*

#### One Kit of RAPTOR includes:

- 4 x 750ml RAPTOR base coating
- 1 x 1L RAPTOR hardener

#### Features and Benefits

- Easy to use: simply FILL - SHAKE - SHOOT®.
- High coverage, up to 125 ft<sup>2</sup>.
- Provides excellent UV protection.
- Waterproof - provides a water tight seal, keeping water out and eliminates the chance for rust.
- Protects against rust, corrosion salt, damp, and extreme temperatures.
- Abrasion and stain resistant.
- Dries rapidly, is flexible, and helps deaden sound and vibrations.
- Provides excellent adhesion.
- No need to wax after application.
- Can be tinted to match any color.



### RAPTOR TRUCK BED LINER - TINTABLE

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##### Substrates and Preparation

###### Substrates

- Original Paint
- Aluminum\*
- Bare Metal\*
- Galvanized\*
- E-coat\*
- Polyester Fillers
- Plastic
- Fiberglass\*
- GRP
- SMC
- Glass
- Concrete\*
- Wood\*

\* *Some substrates require additional surface preparation before applying RAPTOR. See Substrate Preparation section for details.*



###### Substrate Preparation

To achieve best results with RAPTOR, good preparation is essential.

- 1 Remove all loose material and any rust from the surface to be coated.
- 2 Clean and degrease the surface.
- 3 Abrade the surface with P120-P180 abrasives.
- 4 Re-clean the surface.

- \* Aluminum, bare metal, and galvanized: Prime with an etch primer, such as two coats of U-POL's ACID#8 (UP0741V).
- \* Fiberglass and plastic: For optimal adhesion, use an adhesion promoter, such as U-POL's GRIP#4 (UP0799).
- \* Wood and concrete: For best results, before applying RAPTOR, the surface must be sealed with a urethane, acrylic, or epoxy wood or concrete sealer. If the wood has been pre-treated or painted, clean and dry the wood before sealing.
- \* OEM E-Coat: Scuff the surface with an abrasive pad then clean and degrease.



### RAPTOR TRUCK BED LINER - TINTABLE

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#### Mixing



#### Mixing Ratio



As simple as **FILL - SHAKE - SHOOT®!**

RAPTOR is easy to mix. Simply fill the RAPTOR coating bottle with hardener to the first ridge "A" (250ml/0.5 pints of hardener). Add basecoat tinter no higher than the second ridge "B"\* (no more than 100 ml/10% of basecoat tinter by volume\*). Replace cap and SHAKE contents vigorously for at least 2 minutes. SHOOT as follows.

**\*\*\* Only mix one bottle of RAPTOR at a time. Clean gun between mixes. \*\*\***

RAPTOR can be applied using U-POL's Schutz gun (UP0726) or an HVLP Gravity Gun. Mix ratios are dependent on the type of gun used.

#### Mixing by volume

Pints	Coating (A)	Hardener (B)	Max Tint
2	28oz	8oz	3.2oz
1.5	21oz	6oz	2.7oz
1	14oz	4oz	1.8oz
<b>ML</b>			
1000	840g	241g	109g
750	630g	181g	81g
500	420g	121g	54g
250	210g	60g	27g

#### Mixing by weight

Grams	Coating (A)	Hardener (B)	Max Tint
1000g	777g	223g	100g
500g	388g	112g	50g
<b>Pounds</b>			
1.0lb	12.4oz	3.6oz	1.6oz
0.5lb	6.2oz	1.8oz	0.8oz

#### RAPTOR Hardener

#### Color

**U-POL SYSTEM 20** Fast Thinners (UP242-)

#### GUN/1 (UP0726)

3:1

Up to 10% Basecoat Tinter

Ready to use, no thinner needed

#### HVLP Gravity Gun

3:1

Up to 10% Basecoat Tinter

Up to 10% to reduce the texture  
About 25% more coverage

RAPTOR requires solvent based toners, such as urethane based color, 2K acrylic solid color, or mixed acrylic basecoats. RAPTOR cannot be used with water based, polyester, or enamel paints. Add tint no more than 10% by volume. Toners are generally available through the distributor where you purchased your RAPTOR kit or any distributor who sells automotive finishes. \*See FAQs for more info about tinting.



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##### Application

###### Spraying RAPTOR

- 1 Remove cap from RAPTOR bottle with the mixed RAPTOR.
- 2 Attach the RAPTOR bottle to the U-POL UP0726 gun.
- 3 Adjust the air pressure on your compressor to 40-60 PSI.
- 4 Apply to the prepared surface with an even sweeping motion to obtain the desired texture.
- 5 If applying additional coats allow to flash off for 60 minutes between coats.

U-POL recommends that you spray a test panel with RAPTOR first to ensure the desired texture is achieved.

###### Rolling RAPTOR

- 1 Pour mixed RAPTOR into a suitable paint tray.
- 2 Apply using an open textured roller.
- 3 Cut in all corners and hard to reach areas with a brush.
- 4 Load roller with the product and apply slowly using medium pressure.
- 5 Rolling on RAPTOR results in a lower build. Additional coats will be necessary. When applying additional coats, observe 40 minute flash off period between coats.

Do not use in extreme cold or hot temperatures. Ideal application temperature is 68°F (20°C) with humidity of less than 60%.



###### Coats

U-POL recommends applying 2-3 coats of RAPTOR. More than 3 coats is not recommended.

**MIL Build:**  
**As applied using**  
**UP0726 gun**

1 Coat: 7.0 MILs      2 Coats: 12.0 MILs      3 Coats: 15.0 MILs  
*All measurements are approximate and are dependent on the application method.*



###### Flash-off / min @ 68°F

Wait 60 minutes between coats.

**IMPORTANT! Do not place heavy loads on the surface until RAPTOR is fully cured.  
Please see dry times below.**



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##### Drying Times

Touch Dry @ 68°F	Less than 1 hour
Light Duty @ 68°F	2-3 days
Regular Duty @ 68°F	5-7 days

Reducing flash off time, excessive film build and/or reduced temperatures will alter drying time.

Raptor should not be covered until it has fully cured which takes about 5-7 days. Covering Raptor with tarps or plastic sheeting before it has cured does not allow the solvents to escape and won't allow Raptor to fully cure.

##### Baking

RAPTOR can be baked for 30 minutes @ 140°F. Baking will speed up the initial cure, but it is still recommended that you wait 2-3 days for light usage and 7 days for heavy duty usage.

##### I.R. Cure

I.R. curing is not recommended



##### Over Painting

RAPTOR can be overpainted with most modern paint systems. When overpainting, prep the surface as follows:

- 1 Let sprayed RAPTOR dry for 24 hours.
- 2 Abrade with a fine abrasive pad.
- 3 Clean and degrease.

##### Equipment Cleaning

Clean spray gun in-between mixes. All equipment should be thoroughly washed immediately after use.

##### Shelf Life

2 years from date of manufacture in sealed original containers.

##### Storage

RAPTOR should be stored in cool, dry conditions in the original containers.



### RAPTOR TRUCK BED LINER - TINTABLE

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##### Properties & VOC Information



#### Data

Flash point	-0.4°F
Solid content without thinner	Approx 57 %
Specific weight	Approx 1.1

#### Chemical Resistance

- Diesel: No effect
- Petrol: Surface softening
- Xylene: Surface softening
- Hydraulic Oil: No effect
- NaOH: No effect
- Bleach: No effect
- Alcohol: No effect
- Horse urine: No effect



#### VOC Information

##### UP0821 RAPTOR Tintable 4L Kit

As Received	Regulatory:	293 g/l (2.4 lbs/gal)
	Actual:	218 g/l (1.8 lbs/gal)
As Applied	Regulatory:	389 g/l (3.2 lbs/gal)
	Actual:	314 g/l (2.6 lbs/gal)

##### UP0821V 2.6 VOC RAPTOR Tintable 4L Kit

As Received	Regulatory:	293 g/l (2.4 lbs/gal)
	Actual:	218 g/l (1.8 lbs/gal)
As Applied	Regulatory:	285 g/l (2.4 lbs/gal)
	Actual:	193 g/l (1.6 lbs/gal)

##### UP0829 1.7 VOC RAPTOR Tintable 4L Kit

As Received	Regulatory:	203 g/l (1.7 lbs/gal)
	Actual:	133 g/l (1.1 lbs/gal)
As Applied	Regulatory:	179 g/l (1.5 lbs/gal)
	Actual:	105 g/l (0.9 lbs/gal)



### RAPTOR TRUCK BED LINER - TINTABLE

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##### Frequently Asked Questions

###### Preparation

- Q. Can RAPTOR be applied on top of a 2-part Epoxy Primer?**
- A. As long as the primer is fully cured, RAPTOR can be applied on top of a properly prepared and sanded 2-part epoxy primer.
- Q. Can RAPTOR be applied on top of a basecoat?**
- A. RAPTOR can be applied on top of a basecoat. The basecoat must be fully cured and properly prepared and sanded before applying RAPTOR.
- Q. Can RAPTOR be applied on top of a powder coat?**
- A. Yes, RAPTOR can be applied on top of a properly prepared and sanded powder coat.
- Q. Can you use automotive paint tape with RAPTOR?**
- A. Yes, you can use automotive tape with RAPTOR. Wait between 15-20 minutes after applying RAPTOR before removing the tape.

###### Technical Properties

- Q. How can I get a textured grip finish?**
- A. Add about ¼ - ½ cup per RAPTOR Bottle of clean/dry silica sand. Mix in the bottle and spray. If sand is added after RAPTOR is sprayed, the sand will not fully adhere and will eventually brush off.
- Q. Can RAPTOR be reduced?**
- A. Yes, RAPTOR can be reduced up to 10%. When reducing RAPTOR, use a urethane based reducer.
- Q. What is the gloss level of RAPTOR?**
- A. The gloss level of Black RAPTOR is approximately 10 gloss units, or a satin finish.
- Q. What is the Shore Hardness of RAPTOR?**
- A. The Shore D value for fully cured RAPTOR is 85.
- Q. Does RAPTOR contain any rubber?**
- A. No, there is no rubber in RAPTOR. RAPTOR is a thick polyurethane coating, which gives it great UV stability and impact resistance without the use of additives such as rubber.
- Q. Is RAPTOR isocyanate free?**
- A. No, RAPTOR utilizes an isocyanate hardener.
- Q. What is the maximum temperature after applied?**
- A. The maximum temperature after application is 185°F.



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##### Tinting

**Q. What can RAPTOR be tinted with?**

**A.** For best results, use solvent based acrylic basecoat toners (ask your paint supplier to leave out the binders). NOTE: Acrylic basecoat toners tend to have high color strength so use sparingly (less than 10% tint by volume). RAPTOR is compatible with any urethane based color, including 2K acrylic solid color and mixed acrylic basecoats, and can be added up to 10% by volume. RAPTOR cannot be used with water based, polyester, or enamel paints.

**Q. I don't need a shiny application. How can I get a dull finish?**

**A.** There are proprietary matting agents available in the U.S. for other 2K products, which are suitable for use in RAPTOR.

**Q. Does the milk color of RAPTOR lighten up the tint color? How can I get a brilliant color?**

**A.** For best color match results, Tintable RAPTOR requires a urethane single stage color. If you choose to use basecoat, ask your paint supplier to leave the binder out of the formulation so it is pure pigment. The final color will appear slightly lighter than the base color. Once mixed, check the color of the tinted system before spraying and adjust if critical.

**Q. How do you change the color after an incorrect color has been sprayed?**

**A.** If the colors are close, reapply with the correct shade of RAPTOR. If the colors are not close, strip back the original RAPTOR and reapply.



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#### PRODUCT CODES

Product Code	UP Number	Description	Case Quantity
RLB/S4	UP0820	RAPTOR Black 4L Kit	1
RLT/S4	UP0821	RAPTOR Tintable 4L Kit	1
RLB/SV4	UP0820V	RAPTOR 2.6 VOC Black 4L Kit	1
RLT/SV4	UP0821V	RAPTOR 2.6 VOC Tintable 4L Kit	1
RLB/S17-4	UP0825	RAPTOR 1.7 VOC Black 4L Kit	1
RLT/S17-4	UP0829	RAPTOR 1.7 VOC Tintable 4L Kit	1

**IMPORTANT:** FOR PROFESSIONAL USE ONLY. Read full instructions before use.

This product contains hazardous materials and therefore appropriate personal protective equipment should always be used. Please refer to the label and consult the material safety data sheet for full handling instructions and personal protection information. U-POL disclaims any liability where the user does not wear the recommended personal protective equipment. The above data is for information only and may change without prior notice. It is the Buyers responsibility to ensure the suitability of the products for their own use and check the up-to-datedness of this information. The recommendation of use of our products and application are based on our knowledge and experience. Please refer to the label and consult the material safety data sheet for full handling instructions and personal protection information. These are available via your local stockist or via the U-POL website at [WWW.U-POL.COM](http://WWW.U-POL.COM). U-POL is not responsible for the results obtained by others over whose methods we have no control and thereof U-POL is not liable for consequential or incidental damages including loss of profits.

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