

Technical Data Sheet

Ver.: 2022-1

9001 Bedliner ^(black) / 9002 Bedliner ^(tintable) 2K heavy-duty protective coating

Description

Highly resistant, tough, and slightly flexible 2K polyurethane-acrylic paint providing a scratch-resistant protective coating for different surfaces. It can withstand the toughest situations and protects against fuels and oils, water and salt. The 9002 can be tinted with Unimix 20 tinting tonners to match any colour wanted.

Use

Heavy duty surfaces on commercial vehicles; off-road vehicles (interior and exterior); chassis, floors, storage areas and other parts; camping cars, trailers and SUVs; roof racks and rooftop carriers; body panels, tube guards, wheel arches, truck and bus interior and exterior ...

Features & Benefits

- High UV and weathering resistance.
- Excellent shock and scratch resistance.
- Fine and coarse structures can be sprayed depending on the application.
- Strong adhesion on wide range of dry substrates. •
- Tintable to match any colour.
- Provides a tough scratch and stain resistant surface.
- Can be applied with UBS gun, HVLP gun, roller, or brush.
- High resistance to fuels and oils.
- Excellent water resistance.
- Can be used as a sound-deadening product in wheel-housings / chassis of cars, trucks and other.
- Simple and easy to use.

Substrate preparation

Clean, dry, and degrease the surface with a suitable anti-silicone cleaner.

- Bare Steel should be lightly abraded and completely rust free before application. The bedliner can be applied directly, but a 2K Epoxy primer or Etch primer is recommended where optimum adhesion and corrosion resistance is required. In case of using Etch/Wash primers, seal them with 2K filler before application of Bedliner.
- New parts/panels sand with grit P240-320/dry or P800/wet
- Old coatings sand with grit P280 P320/dry or P800/wet.
- GRP or Fiberglass sand with grit P320/dry.
- Polyester Fillers sand with grit P120-P320/dry.
- Zinc and aluminum panels: use scuffing pad and matting paste to abrade the surface.
- In case of coating plastics: Before application, reheat the object to be painted for 60 minutes at 60 °C/140 °F. Degrease
 the surface with Silco antisilicone degreaser. Sand/matt with matting paste. Clean again with Silco antisilicone
 degreaser. Allow parts to dry completely.

ATTENTION: Sanded material must be removed completely! After this preparation we recommend doing a wetting test with water. If the water rolls off quickly repeat the pre-treatment. Additionally, use of Antistatic Degreasing Wipe (art.no. 2215) is recommended. Due to the most different kinds of plastic and compounds on the market we recommend pre-testing the product on original plastic parts (application and adhesion).

Application data

Application with UBS gun

1. Shake the container vigorously

2. Open the can, add 200 ml of hardener, close the lid

3. Shake vigorously for another 2 minutes

Only mix one bottle of bedliner at a time. Clean gun between mixes.

MIXING RATIO	<u>By volume</u>	<u>By weight</u>
9001/9002 Bedliner	3	100
9230/9250 Hardener	1	29

Application

- 1st layer Apply a uniform coat with a pressure setting of 2-4 bar⁽¹⁾ until full coverage is achieved.
- Flash-off Allow at least 10 minutes of flash-off.
- With thicker layers the flash-off needs to be longer to keep the desired structure of the bedliner.
- **2nd layer** To achieve the desired texture reduce the pressure to approx. 1,5-2 bar⁽¹⁾ and increase the spray distance to approx. 45 60 cm. Different textures can be achieved also with the speed of application.
- Flash-off before baking allow 10 15 minutes

⁽¹⁾ The final structure is directly connected to the spraying pressure, distance, and flash-off times.

Application conditions:

From 10 °C to 25 °C (50 – 77 °F) and up to 80 % relative air humidity. Ensure adequate air ventilation.

Application with gravity spray guns / paint roller

- 1. Shake the container vigorously.
- 2. Open the can, pour the paint in a mixing cup, add hardener in 3:1 mixing ratio (by volume).
- 3. Mix thoroughly.
- 3. Add thinner and mix thoroughly.

2 - 2.5 mm nozzle for moderate textured layers

MIXING RATIO	<u>By volume</u>	<u>By weight</u>
9001/9002 Bedliner	3	100
9230/9250 Hardener	1	29
7050 Thinner	0-5%	 0 – 4 * Refer to Table 1.1 for more weight mixing ratios

1.6 - 1.8 mm nozzle for finer textured layers

MIXING RATIO	<u>By volume</u>	<u>By weight</u>
9001 Bedliner	3	100
9230/9250 Hardener	1	29
7050 Thinner	10 - 20%	8 - 16
		* Refer to Table 1.1 for more weight mixing ratios

Application

- 1st layer Apply a uniform coat with a pressure setting of 2 bar until full coverage is achieved.
- Flash-off Allow at least 10 minutes of flash-off.
 With thicker layers the flash-off needs to be langer to keep the
 - With thicker layers the flash-off needs to be longer to keep the desired structure of the bedliner.
- **2nd or 3rd layer** To achieve the desired texture reduce the pressure to approx. 1.5 2 bar and increase the spray distance to approx. 45 60 cm. Different textures can be achieved also with the speed of application.
- Flash-off before baking allow 10 15 minutes

Application conditions:

From 10 °C to 25 °C (50 – 77 °F) and up to 80 % relative air humidity. Ensure adequate air ventilation.





Roller application

Apply evenly and overlapping, until opacity is achieved. If full hiding power is not yet achieved, a second coat can be applied after an intermediate flash-off time of 30-60 minutes.

Choose an appropriate roller to achieve the desired structure.

- Rough structure use texture roller
- Medium structure use short nap roller
- Fine structure use foam roller

Tinting

In case of using tintable bedliner, 5 – 10 % of Unimix 20 pigment paste should be added to the bedliner. Pigment pastes should be added before mixing Bedliner with a hardener.

(Black, dark grey, blue ...) Add **5%** of pigment paste by weight per weight of neutral bedliner.

Colours with good coverage

Colours with poorer coverage (Yellow, orange, white ...) Add **10%** of pigment paste by weight per weight of neutral bedliner.

Drying times

		Potlife	Flash-off	Tack free	Touch dry	Assembly dry	Through dry
	at 20 °C (68 °F)	1,5 h	10 – 60 min	30 – 45 min	2 h	24 h	5 - 7 days
\bigcirc	at 60 °C (140 °F)	-	10 – 15 min before baking	-	15 – 20 min	25 - 30 min	5–7days

Shorter flash-off time, excessive film build, and/or reduced drying temperatures will prolong the drying time. Do not allow the product to come in contact with water for at least 72 hours from application. Higher film builds will extend the final cure time.

High temperature drying

- Baking at 60°C/140°F the product can be baked, this will speed up the initial cure, but it is still recommended to wait 7 days for regular use of the painted surface.
- Drying with IR lamps is not recommended.

Overcoating

Bedliner is coatable with basecoats, clear coats and topcoats.

Overcoatable wet-on-wet after minimum 3 hours and maximum 24 hours. After 24 hours abrade with a fine abrasive paper, clean and degrease.

Additional information

- Make a sample to ensure your spray gun and your mixture give you the desired structure.
- Different ways of application give different textures and consequently the different gloss of the colour.
- Spray distance and spray pressure change the texture.
- To achieve a uniform texture, apply the last layer as drop coat.
- Masking paper, foils and tapes which were overcoated with the bedliner, must be removed immediately after application.
- To obtain a non-slip surface just add 10% by weight of 90.665 UniMix Texture Additive to the mixture of basic paint + hardener. Stir thoroughly and apply immediately.

Complementary products

9230-0,2 2K Hardener, fast

9250-0,2 2K Hardener, standard

7050 Acrylic Thinner, standard

Equipment cleaning

Use solvent-based thinners / cleaners for equipment cleaning: 5505, 5555, 7030/7050

Testing of the material

Any kind of testing of the applied material (adhesion test, stone-chip test, chemical resistance, salt chamber test...) needs to be done at least 15 days after the application.

Prod. Nr.	Description	Volume	Packaging Box
9001-B-0,6	Black	600 ml	12 pcs
9002-T-0,6	Tintable	600 ml	12 pcs

Physical properties

Finish:	Orange peel / texturized effect
Appearance:	Semi-matt
Specific weight:	~1,15 kg/L
Theoretical coverage:	4 m²/I(may vary based on application thickness and finish type)
Shelf life:	Min. 12 months from the production date under normal storage conditions and unopened can.

VOC content

EU Directive	840 g/l[2004/42/llB(e)]
Actual VOC (UBS gun)	500 g/l
Actual VOC (HVLP spray gun)	540 g/l

FOR PROFESSIONAL USE ONLY!

Always read the instructions.

IMPORTANT: This product contains hazardous substances at work, so it is necessary to always use/wear appropriate protective equipment. For further instructions, check the label on the product and safety data sheet. A person who uses the product for any purpose other than recommended in this technical data sheet, acts at his own risk. It is the user's responsibility to take all necessary steps to fulfil the local legislation. Materials described are designed for application by professional, trained personnel using proper equipment and are not intended for sale to the general public.

Information and methods described are based on the best information and practices known to us and serve merely as guidelines for optimal use, without liability to performance, results, or fitness for any intended use. We do not accept any responsibility for the behavior of the product or damage arising from the use of the product. Before using the product, the user must check if this is the latest version. All products mentioned in this data sheet are trademarks owned by Silco.

Volume of RFU paint required (ml)	Weight Bedliner	Weight Bedliner + Hardener	Weight Bedliner + Hardener + Thinner
100	100	83	107
250	250	208	267
330	330	274	352
500	500	416	534
750	750	623	801
1000	1000	831	1067

Table 1.1 – Mixing ratio by weight (3:1 + 5% mixing ratio with hardener and thinner)

Table 1.2- Mixing ratio by weight (3:1+20% mixing ratio with hardener and thinner)

Volume of RFU paint required (ml)	Weight Bedliner	Weight Bedliner + Hardener	Weight Bedliner + Hardener + Thinner
100	75	96	108
250	188	241	270
330	248	318	357
500	375	482	540
750	563	722	810
1000	750	963	1080