



### Grip-Gard BC Translucent

### Technical Data Sheet

October 2013

Topcoat

#### Description

Grip-Gard BC Translucent uses a specially blended binder which converts Grip-Gard BC toners into a fast drying, durable backlit sign coating. With this system, backlit plastic signs can be painted quickly and easily with great results in a vast array of colors.



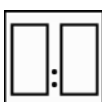
Remove any existing surface contaminants



Remove static electricity

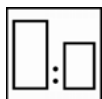


- In Mixit or Color Manager, look up your color code then choose GBTR
- **Note:** Detailed color mixing are available on page 3 under Mixing



#### Translucent Ready to Spray Ratio:

- 100 parts Mixed color with GGBC 50 Translucent Binder
- 100 parts GGBC Translucent Fast, Medium or Slow Reducer



#### Opaque Ready to Spray Ratio:

- 100 parts Mixed color with GGBC 90 Binder
- 50 parts GGBC Translucent Fast, Medium or Slow Reducer



#### Spray gun set-up:

Gravity: 1.3 – 1.5 mm  
Siphon: 1.6 – 1.8 mm

#### Application pressure:

30–40 psi (2-3 bar) at the air inlet

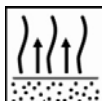
HVLP max 10 psi (0.7 bar) at air cap



#### Application

**Transparent:** Spray 4 – 8 light coats depending on the color and translucency desired.

**Opaque:** Spray until color level is achieved. Then apply a white backing coat, followed by a black or aluminum block out coat.



#### Flash between coats

2 - 5 minutes at 70°F (20°C)



Dry to recoat: 10 minutes at 70°F (20°C)

Dry for installation: 24 Hours at 70°F (20°C)



Use suitable respiratory protection.

AkzoNobel Sign Finishes recommends the use of a fresh air supply respirator.

## Description

Grip-Gard BC Translucent uses a specially blended binder which converts Grip-Gard BC toners into a fast drying, durable backlit sign coating. With this system, backlit plastic signs can be painted quickly and easily with great results in a vast array of colors.

## Suitable substrates

### Grip-Gard BC Basecoat can be applied directly over:

- Acrylic, impact modified acrylic, ABS, CAB, polycarbonate, styrene
- Most rigid and flexible vinyl

### Note:

Some polycarbonates are supplied with a Solar Grade treatment on one side. Do not apply Grip-Gard BC Translucent onto the solar treated side of this polycarbonate

## Products and additives

### PRODUCTS:

### BINDER:

### REDUCERS:

### RM COLORS:

• Grip-Gard BC Toners	
• Grip-Gard BC 50 Binder	Item # 483309
• Grip-Gard BC 90 Binder	Item # 397616
• Grip-Gard BC Translucent Fast Reducer: Temperatures: <70°F (20°C). Small surface areas and cold climates	Item # 483310 (1GL) Item # 483796 (5GL) Item # 483518 (53GL)
• Grip-Gard BC Translucent Med Reducer: Temperatures: 70°F–85°F (20°C - 30°C).	Item # 483311 (1GL) Item # 483797 (5GL) Item # 483519 (53GL)
• Grip-Gard BC Translucent Slow Reducer: Larger surface areas Temperatures: 80°F–95°F (27°C–35°C)	Item # 483312 (1GL) Item # 483798 (5GL) Item # 483799 (53GL)
• Grip-Gard BC Trans RM 110 White	Item # 483943 (1GL) Item # 483944 (5GL)
• Grip-Gard BC Trans RM 120 White	Item # 483945 (1GL) Item # 483946 (5GL)
• Grip-Gard BC Trans RM 140 Black	Item # 483947 (1GL) Item # 483948 (5GL)
• Grip-Gard BC Trans RM 160 Black	Item # 483949
• Grip-Gard BC Trans RM 325 Golden Yellow	Item # 483952
• Grip-Gard BC Trans RM 326 Lemon Yellow	Item # 483953
• Grip-Gard BC Trans RM 470 Regal Blue	Item # 483954
• Grip-Gard BC Trans RM 535 Unique Red	Item # 483955
• Grip-Gard BC Trans RM 585 Flame Red	Item # 483956
• Grip-Gard BC Trans RM 595 Bright Scarlet	Item # 483957
• Grip-Gard BC Trans RM 700 Erin Green	Item # 483958

### NOTE:

Use only Grip-Gard BC Translucent Reducers when spraying plastic. **DO NOT** use aromatic solvents such as xylene, toluene, T-2001, T-2002 or lacquer thinner. **These solvents will cause severe damage to some plastics.**

## Basic raw materials

- Grip-Gard BC Translucent Intermix: Acrylic resins, solvents and other ingredients.

## Mixing



### Mixing Machine

Run Grip-Gard BC Basecoat MM colors on mixing machine every 4 hours for 15 minutes



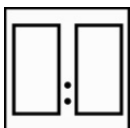
Shake or Stir after mixing your color formula

- **To make a translucent color;** look up your color in you Mixit or Color Manager System then choose GBTR in the product selector and mix your color.
- **To make an opaque color;** look up the GGBC formula then mix ;
  - 100 Parts Toner formula
  - 50 Parts GGBC #90 Binder
    - For Jet Black use toner 140 and for silver use toner 811B or E
    - Any toner from the MM can also be used

## Color mixing:

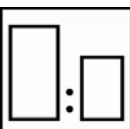
- **To create your own translucent color;** in your Mixit or Color Manager choose GBTR in the product line and add your toners. The computer will automatically determine and add the correct amount of Grip-Gard BC 50 Translucent Binder to use.
- **Note:** If you are choosing a Grip-Gard Basecoat formula to convert to a GBTR Translucent color, mix the toner formula but do not add the GGBC 10 Basecoat Binder. After adding all of the toners, mix 1 part of the GGBC formula with 3 parts GGBC 50 Translucent Binder by volume with the mixing Stick.

**Note: To increase translucency,** add GGBC 70 Transparency Enhancer to the color portion of the formula. Mixit will adjust the level of GGBC 50 Translucent Binder needed.



### Translucent Ready to Spray Ratio:

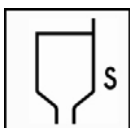
100 parts Mixed color with GGBC 50 Translucent Binder  
100 parts GGBC Translucent Fast, Medium or Slow Reducer



### Opaque Ready to Spray Ratio:

100 parts Mixed color with GGBC 90 Binder  
50 parts GGBC Translucent Fast, Medium or Slow Reducer

## Viscosity



18–20 sec. ZAHN cup #2 (13–15 sec. DIN cup #4) at 70°F (20°C)

## Spray gun set-up / application pressure

Spray gun	Fluid tip set-up	Application pressure	Fluid Spray Rate
High Transfer Gravity	1.3 – 1.5 mm	35 psi	
High Transfer Pressure Feed	1.0 – 1.2 mm	35 psi	10 – 15 oz/min
HVLP Pressure Feed	0.8 – 1.0 mm	Max 10 psi (air cap)	10 – 15 oz/min
HVLP Siphon	1.8 – 2.2 mm	Max 10 psi (air cap)	
HVLP Gravity	1.3 – 1.5 mm	Max 10 psi (air cap)	

## Pot-life

7 days after mixing

## Application process

### TRANSPARENT APPLICATIONS:

- Spray 4 – 8 light coats depending on the color and translucency desired.
- Spray in double light coats first in horizontal then vertical applications. Continue this application until a damp appearance is achieved and then allow flashing. Allow 2 – 5 minutes flash off between coats.
- When spray painting a backlit sign, it is essential that some type of back lighting be utilized. This will allow the spray painter to apply the paint evenly, avoiding a mottled or “blotchy” appearance while obtaining the desired reflected and transmitted color. When painting translucent colors on plastic, you will be required to build up the paint film slowly. Use many light coats. If one or two heavy coats are used, undesirable light and dark spots, known as mottling, will appear. Usually 4 – 8 light coats are required. Allow 3 to 5 minutes flash between coats when a wet film is noted. Note: 4 - 8 coats is a guideline. The spray pattern, equipment, viscosity, temperature, and operator experience will play an important role in achieving the desired result.
- **Note:** To increase translucency, add GGBC 70 Transparency Enhancer to the color portion of the formula. Mixit will adjust the level of GGBC 50 Translucent Binder needed. Then use the normal reduction ratio.

### OPAQUE APPLICATION:

- Spray until color level is achieved. Then apply a black or aluminum block out coat followed by a white light enhancing coat.

## Film thickness

Grip-Gard BC Translucent: 0.2–0.3 mils per single coat.

## Curing time



At 70° F (20°C):  
Recoatable with a second color or back spray white:  
MIN: 10 minutes  
MAX: 7 Days



At 70° F (20°C):  
30 – 45 minutes to tape with fine line or masking tape  
2 hours to apply Grip-Mask spray maskant



At 70° F (20°C):  
Dry for installation: 24 Hours

## Material usage

Approximate square foot coverage per gallon at 0.6 dry mils:

Transfer Efficiency	Unmixed Paint	Ready to Spray
100% (Theoretical)	490 - 495	245 - 250
65% (HVLP)	320 - 325	160 - 165
35% (Conventional)	170 - 175	80 - 85

Note: Coverage values may show significant variation due to the nature of the translucency of the coating

## Weathering properties

Grip-Gard BC Translucent Coatings are not recommended for direct exposure to the elements without the protection of a UV clearcoat or in the case of back-lighted signs, a quality solar grade plastic. Failure to use a topcoat when used in first surface applications on clear plastic will result in the degradation of the paint film.

## Cleaning of equipment

Clean equipment with Cleaning Solvent 790, Cleaning Solvent LV or lacquer thinner.

## RTS VOC

Grip-Gard BC Translucent colors with 50 Binder:	< 6.5 lb/gal. < 780 g/liter
Grip-Gard BC Block out colors with 90 Binder:	< 6.2 lb/gal. < 744 g/liter

## Product storage

Store opened and unopened products with closed lids preferably between 70°F-95°F (10°C-35°C)  
 Avoid too much temperature fluctuation, optimal storage temperature approximately 70°F (20°C)  
 Minimum storage temperature 40°F (5°C)  
 Maximum storage temperature 95°F (35°C)

## SHELF LIFE:

Grip-Gard BC Basecoat Toners: Four years if stored unmixed at room temperature.  
 Grip-Gard BC 50 Trans Binder: Two years if stored unopened at room temperature.  
 Grip-Gard BC Trans Reducers: Two years if stored unopened at room temperature.

## STOCK AVAILABILITY:

Grip-Gard BC Translucent colors are available supplied as ready-mixed colors or can be mixed by means of the Akzo Nobel Mixing System.

## FOR PROFESSIONAL USE ONLY

**IMPORTANT NOTE:** The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advices given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product. Coatings brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel.

### Corporate Office

AkzoNobel Coatings Inc.  
 3587 Parkway Lane,  
 Norcross, GA 30092, USA  
 1-800-618-1010 ON THE WEB AT:  
[www.signfinishes.com](http://www.signfinishes.com)