Specialty Paints & Products for
Sign · Branding · Re-Imaging
1.800.421.7961

Q-COAT TC™ TRANSPARENT COATING

Q-COAT TC™ is a transparent coating used in the manufacture of plastic backlit signage. **Q-COAT TC™** is a combination of high performance acrylic resins, pigments, special solvents and additives to assure maximum non-mottling spray application and long-term product performance.

Q-COAT TC™ is available in a fast dry binder (Q-BASE PB0002™) for semi-rigid or rigid substrates with maximum mar resistance with a diffuser or a moldable binder (Q-BASE PB0005™) for flexible, non rigid substrates when pliability, clarity and maximum adhesion is required.

QHF Environmentally Friendly Product.

RECOMMENDED SURFACE APPLICATIONS:

Second surface polycarbonate, acrylic, impact modified acrylic, CAB, ABS or styrene.
Second surface flexible vinyl and masking materials – Test compatibility prior to production runs.
Second surface existing translucent plastic paint finishes. Test compatibility prior to production runs.

First surface polycarbonate, acrylic, impact modified acrylic, CAB, ABS or styrene.
First surface flexible vinyl and masking materials – Test compatibility prior to production runs.
First surface existing translucent plastic paint finishes. Test compatibility prior to production runs.

Application of **Q-COAT TC™** on any first surface substrate for exterior application requires **Q-COAT TC0033 UV Gloss Clear™** or **Q-COAT TC0037 UV Low Gloss Clear™** for durability. This will protect the color coat and if polycarbonate is being used, it will help protect from yellowing with age.

APPLICATION:

1. 

Safety:
Use only NIOSH approved respirators and personal protection equipment recommended for the product used.

Always review the MSDS – Material Safety Data Sheets before use.

2. 

Surface Cleaning:
Remove plastic surface contaminates with **Q-SOLV™ CD4402™** Plastic Cleaner for Acrylic or **Q-SOLV™ CD4404™** Plastic Cleaner for Polycarbonate utilizing clean lint free cloths or leather chamois.

3. 

Static Electricity Removal:
Step two above should also remove static electricity. If static still exists on substrate, it will be necessary to repeat step two above and both sides of the plastic may need to be cleaned to remove all static build up.

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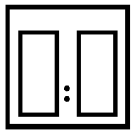
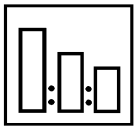
4. 

Reduction Ratio: (Most Common for colors)
1 part **Q-COAT TC™** Plastic Coating Color
1 part **Q-SOLV™** AR Series Reducer(s)

Reduction Ratio: (Most Common for White)
1 part Q-COAT TC™ White Coating
2 parts Q-SOLV™ AR Series Reducer(s)

5. 

Reduction Ratio: (Dark or Difficult to Spray Colors)
1 part **Q-COAT TC™** Plastic Coating Color
1 part **Q-BASE™** PB Series Binder(s)
1 part **Q-SOLV™** AR Series Reducer(s)

6. 

Spray Gun Recommendations:

Gravity Feed	1.3-1.4 mm
Siphon Feed	1.6-1.8 mm
Pressure Feed	1.0-1.4 mm

7. 

Film Properties Spray Application - Translucent:
Apply approximately 4 – 8 coats. More coats may be used to obtain the color translucency required. A back lighted spray booth is recommended to determine when color and translucency is acceptable when compared to the standard color chip. Flash off time between coats should be determined by surface area and ambient temperature. After color and back up white are applied, a minimum total dry film thickness of 1.0 mils is required for film integrity.

Spray Application – Opaque:
Apply approximately 2 – 3 coats. A back lighted spray booth is recommended to determine when light can no longer pass thru. For light colors (yellows, reds, oranges etc) it is recommended to use Block Out Silver FPLQTC0060 and for darker colors, (blues, greens, purples etc) it is recommended to use Opaque Black Q-COAT TC0058 or Block Out Gray FPLQTC0064-TC9. Flash off time between coats should be determined by surface area and ambient temperature. After all colors are applied, a minimum total dry film thickness of 1.0 mils is required for film integrity.

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8. 

Dry Time:

Dry to handle at 75ºF 50% R.H. in 20-30 minutes. Dry to package and ship in a moisture free environment at 24 hours minimum.

Q-SOLV™ REDUCER SELECTIONS:

AR0055™ Alcohol Fast Reducer	Suitable for temperatures below 70^0F.
AR0066™ Alcohol Medium Reducer	Suitable for temperatures between 70^0F–85^0F.
AR0071™ Alcohol Slow Reducer	Suitable for temperatures above 85^0F.
AR0077™ Alcohol Retarder	Recommended only in small quantities of 5-10% by volume in addition to AR Series Reducer when experiencing extremely high temperature and humid conditions.

Q-BASE™ PLASTIC BINDER SELECTIONS:

Q-BASE™ DIFFUSER PLASTIC BINDER:

PB0002™ Lite Defused Binder	More uniform and faster coverage in fewer passes with maximum mar and scratch resistance.

Q-BASE™ CLEAR PLASTIC BINDER:

PB0005™ Clear Moldable Binder	Complete translucency in colors with pliability and maximum adhesion.

APPLICATION NOTES:

When spray-painting a backlit sign, it is essential that some type of back lighting be utilized. This will allow the sign painter to apply the paint evenly, obtaining the desired reflected and transmitted color. A standard panel is recommended to determine color acceptability.

When painting translucent colors on plastic, you will be required to build up the paint film slowly. Utilize a color panel standard to determine color and translucency acceptability. If one or two heavy coats are

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used, undesirable light and dark spots, known as mottling, may occur. Usually 4 coats minimum is required. Allow adequate flash off time between coats.

Note: the 4-coat rule is a guideline. The spray pattern, equipment, viscosity, temperature, and operator experience will play an important role in achieving the desired result.

When spraying dark, difficult colors or hard to reach areas it may be necessary to add additional **Q-BASE™** PB Series Binder(s) in a proportion of 1:1 by volume before adding **Q-SOLV™** AR Series Reducer(s). This will allow you to apply more coats evenly. This technique can be used with any color to obtain a more even film build.

If utilizing a combination of transparent paint and vinyl decals, it is recommended to pre-shrink the vinyl by low heat bake before application of the vinyl to prevent excessive vinyl shrinkage with age.

Always test surface preparation, primer and topcoat compatibility to determine acceptability before any production run.

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