



VB-08

Hot Wheels® Spectraflame®

VHW1 Aqua
VHW2 Medium Sapphire
VHW3 Lime Gold
VHW4 Rich Yellow Gold
VHW5 Bright Emerald
VHW6 Anti-Freeze Green

VHW7 Orange
VHW8 Bright Red
VHW9 Hot Wheels® Blue
VHW10 Hot Pink
VHW11 Light Red Watermelon
VHW12 Purple

Spectraflame® offers 12 colors from PPG's partnership with Mattel's *Hot Wheels®* design team. Used over *Liquid Metal*, *Spectraflame®* gives the deep candy-over-metal look that has been popular on die cast cars for years. Now, those colors are available for your project!

Spectraflame's® colors are available in factory packs only. They can be combined to produce an endless number of gorgeous tri-coat effects. *Spectraflame®* must be sprayed over *Liquid Metal*.



Compatible Surfaces

Spectraflame® is used in conjunction with the systems listed below:

- DBC Refinish Systems—Follow P-175 *Deltron®* DBC recommendations for proper preparation and compatible primers.
- BC Refinish Systems—Follow EU02 *Global Refinish System®* BC recommendations for proper preparation and compatible primers.
- Reference the *Vibrance Compatibility Chart* (VB20) for compatible clears and custom formulating.

Note: *Spectraflame®* colors must be used over a *Liquid Metal* substrate.

Spectraflame®

Directions For Use

Surface Preparation:



When working on custom finishes, close attention to the details outlined for standard basecoat preparation, sanding, and cleaning is needed to achieve the optimum results.

Spectraflame® colors are designed to be applied over a *Liquid Metal* substrate. See VB05 *Liquid Metal* product sheet for appropriate preparation.

Standard Preparation

Follow standard basecoat preparations outlined in Product Information Bulletin P-175 (*Deltron® DBC*) or EU02 (*Global Refinish System® BC*) for preparing the surface.

Settling may occur in shipping. Hand stir thoroughly before the addition of the solvent.

Mixing Ratio:

Tri-Coat Mixing Over
Liquid Metal



Apply Liquid Metal:

Ground Coat:

VM4201 : VR9200

1 part : 3 parts

(See VB05 *Liquid Metal* product sheet)

Liquid Metal Notes:

- Hand stir thoroughly after mixing.
- Apply *Liquid Metal* using multiple, even light coats until a smooth, even “metal”-like appearance is achieved.
- *Liquid Metal* must be used as a silver ground coat for *Spectraflame®* colors.
- Before applying a midcoat, allow the final coat of *Liquid Metal* to flash a minimum of 15–30 minutes.
- Do not tape directly over *Liquid Metal*.
- If taping is required, apply 1 coat of DBC500 or D895 color blenders, allowing 30–40 minutes before taping.

***Spectraflame®* colors must be used over a *Liquid Metal* substrate.**

Midcoat Reductions For
Spectraflame® Using DBC
in Larger Areas:



Apply Spectraflame® midcoat using DBC:

1. Mix Spectraflame® with DBC500

Spectraflame® : DBC500

1 part : 1 part

2. Spectraflame®/DBC500 mixture can then be reduced as shown below and 2-3 coats applied;



Spectraflame®/

DBC500 : DT Reducer

1 part : 1 1/2 parts

Midcoat Reductions For
Spectraflame® Using DBC
in Smaller Areas:



Spectraflame® : DT Reducer

1 part : 1 1/2 parts

DX57 activator **must** be added at 1.5 oz. per RTS quart to maintain VOC compliance. For tri-coat custom colors, the activators **must** be used in both the ground coat and mid-coat colors depending on the system used.

Job must be completed within 2 hours at 70 degrees when using *Spectraflame®* with DX57, or lifting may occur.



Pot Life:

1 hour at 70°F (21°C) mixed. *Using material beyond 1 hour may result in wrinkling or other product failures (especially on multiple colors).*

Directions For Use

Mixing Ratio:

Midcoat Reductions For Spectraflame® Using BC in Larger Areas:



Apply Spectraflame® midcoat using BC:

1. Mix Spectraflame® with D895

Spectraflame® : D895

1 part : 1 part

2. Spectraflame®/D895 mixture can then be reduced as shown below and 2-3 coats applied;



Spectraflame®/D895 : D-Thinners

1 part : 1 1/2 parts

Midcoat Reductions For Spectraflame® Using BC in Smaller Areas:



Spectraflame® : D-Thinners

1 part : 1 1/2 parts

D888 activators **must** be added to maintain VOC compliance. For tri-coat custom colors, the activators **must** be used in both the ground coat and mid-coat colors depending on the system used.

Job must be completed within 2 hours at 70 degrees when using Spectraflame® with D888, or lifting may occur.



Pot Life:

1 hour at 70°F (21°C) mixed. Using material beyond 1 hour may result in wrinkling or other product failures (especially on multiple colors).

Spectraflame® Notes:

- Agitate after reduction and strain with a 200 micron strainer, or finer.
- A consistent spray pattern is crucial to prevent striping from occurring.
- Apply light even coats, walking the side of the object being painted from end to end, being careful not to follow the body lines.
- Do not overlap or panel paint large objects such as sides of a car or dark areas may result.

Additives:



No additional additives should be used.

Spraygun Set-up:



Apply: 2 coats or until desired color is achieved

Fluid Tip: 1.0–1.3 mm or equivalent

Air Pressure: 8–10 PSI at the cap for HVLP guns
35–45 PSI at the gun for conventional guns

Drying Times:



Between Coats:
70°F (21°C) 5–10 minutes

Dry Time to Clearcoat: 15–30 minutes
If clear is not going to be applied within 24 hours, apply 2 coats of DBC500 or D895 over the last coat of the basecoat/midcoat.
If the basecoat color is allowed to dry more than 24 hours, it must be scuffed and new basecoat color applied.

Tape Time:
70°F (21°C) 30–60 minutes

Note: Basecoat colors are designed to dry low in gloss. This makes color match and its approval difficult to see until the clearcoat is applied. A good technique is to spray the basecoat and clearcoat on a small test panel before spraying the actual job.

Directions For Use

Clearcoating:

Depending on VOC limits, *Spectraflame*[®] can be clearcoated using the *Deltron*[®] and *Global* clears listed below.

Reference the *Vibrance* Compatibility Chart (VB20) for compatible Clears and custom formulating.

5.2 lbs./gal. VOC
Multi-stage limit
(with VM4201
application)

Without DX57 or D888

Requires 4.13 lbs/gal VOC clear or lower. Options include:

Deltron[®]:

DCU2002 w/ DCX hardeners (only)
DCU2021 w/ DCX hardeners (only)
DCU2042, DC3000, DCU2010,
DC3010, DC4010

Global:

D890, D8121, D8150

With DX57 or D888

Requires 4.39 lbs/gal VOC clear or lower. Options include:

Deltron:

DCU2002, DCU2021, DCU2042
DCU2082, DC3000, DC4000,
DCU2010, DC3010, DC4010

Global:

D890, D8121, D8150

4.5 lbs./gal. VOC
Multi-stage limit
(with VM4201
application)

Without DX57 or D888

Requires 2.73 lbs/gal VOC clear or lower. Options include:

Deltron:

DCU2010, DC3010, DC4010

Global:

D8121

With DX57 or D888

Requires 2.99 lbs/gal VOC clear or lower. Options include:

Deltron:

DCU2010, DC3010, DC4010

Global:

D8121

Technical Data:

	Without DX57 or D888	DX57 or D888
VOC (PKG) less exempt solvents	5.72-5.89 lbs/US Gal 685-706 g/l	5.72-5.89 lbs/US Gal 685-706 g/l
VOC (RTS 1:1½) less exempt solvents	6.51-6.55 lbs/US Gal 780-785 g/l	5.99-6.03 lbs/US Gal 718-723 g/l
Total Solids by Volume (RTS)	7.57-8.64%	10.81-11.83%
Sq. Ft. Coverage/US Gal (RTS)	121-139	173-190
Dry Film Build Per Coat	0.3 mils	0.4 mils
Wet Film Build Per Coat	1.2 mils	1.6 mils

Important:



Spectraflame[®] formulas are created by combining the brilliant colors of dyes with conventional pigments to create the range of colors equal to any candy finishes on the market. The use of *Spectraflame*[®] colors, however, does result in the potential for color fade, dependent on the intensity and duration of exposure to sunlight.

The contents of this package must be blended with other components before the product can be used. Before opening the packages, be sure you understand the warning messages on the labels of all components, since the mixture will have the hazards of all its parts. Improper spray technique may result in a hazardous condition. Follow spray equipment manufacturer's instructions to prevent personal injury or fire. Follow directions for respirator use. Wear eye and skin protection. Observe all applicable precautions.

Spectraflame®

PPG HOT WHEELS® SPECTRAFLAME® COLOR TIPS

These tips are to be used only as a guide to match the colors shown on the DOX441 color card for *Spectraflame®*. When spraying PPG Hot Wheels® *Spectraflame®* colors, it is recommended that the following application procedures be followed:

Always spray a test panel before spraying the job to verify:

- Color
- Number of coats
- Ease of sprayability of a Candy type of finish. See tips for spraying *Radiance® II*

Gun set-up used for these tips:

- 1.0 Fluid tip, 30 PSI at the gun

Vibrance VM4201 Liquid Metal application:

- *Spectraflame®* colors must be used over a *Liquid Metal* substrate.
- Mixed; VM4201 : VR9200 (See VB05 *Liquid Metal* product sheet)
1 : 3
- Spray multiple light coats evenly until a uniform finish is achieved.

Apply the *Spectraflame®* color using the tips below:

VHW 1 AQUA	VHW 5 BRIGHT EMERALD	VHW 9 HOT WHEELS® BLUE
<i>5 light coats or until desired color</i> Mix color 1 part to 1 part DBC500 or D895 Reduce 150% with DT885 or D872 or slower	<i>10 light coats or until desired color</i> Mix color 1 part to 1 part DBC500 or D895 Reduce 150% with DT885 or D872 or slower	<i>4 light coats or until desired color</i> Mix color 1 part to 1 part DBC500 or D895 Reduce 150% with DT885 or D872 or slower
VHW 2 MEDIUM SAPPHIRE	VHW 6 ANTI-FREEZE GREEN	VHW 10 HOT PINK
<i>6 light coats or until desired color</i> Mix color 1 part to 1 part DBC 500 or D895 Reduce 150% with DT885 or D872 or slower	<i>6 light coats or until desired color</i> Mix color 1 part to 1 part DBC500 or D895 Reduce 150% with DT885 or D872 or slower	<i>8 light coats or until desired color</i> Mix color 1 part to 1 part DBC500 or D895 Reduce 150% with DT885 or D872 or slower
VHW 3 LIME GOLD	VHW 7 ORANGE	VHW 11 LIGHT RED WATERMELON
<i>4 light coats or until desired color</i> Mix color 1 part to 1 1/2 parts DBC500 or D895 Reduce 150% with DT885 or D872 or slower	<i>8 light coats or until desired color</i> Mix color 1 part to 1 part DBC500 or D895 Reduce 150% with DT885 or D872 or slower	<i>4 light coats or until desired color</i> Mix color 1 part to 1 part DBC500 or D895 Reduce 150% with DT885 or D872 or slower
VHW 4 RICH YELLOW	VHW 8 BRIGHT RED	VHW 12 PURPLE
<i>6 light coats or until desired color</i> Mix color 1 part to 1 part DBC500 or D895 Reduce 150% with DT885 or D872 or slower	<i>8 light coats or until desired color</i> Mix color 1 part to 1 part DBC500 or D895 Reduce 150% with DT885 or D872 or slower	<i>14 light coats or until desired color</i> Mix color 1 part to 1 part DBC500 or D895 Reduce 150% with DT885 or D872 or slower

Spectraflame®

See Material Safety Data Sheet and Labels for additional safety information and handling instructions.

EMERGENCY MEDICAL OR SPILL CONTROL INFORMATION (412) 434-4515; IN CANADA (514) 645-1320

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