VIBRANCE COLLECTION™
PPG A PPG BRAND

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.

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Note: Custom or exotic finishes are excluded from coverage under the PPG Paint Performance Guarantee.

Product Information Effective 4/07

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 VB04 *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 VB04 *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	With DX57 or D888
Requires 4.13 lbs/gal VOC clear or lower. Options include:	Requires 4.39 lbs/gal VOC clear or lower. Options include:
***Deltron*®:** DCU2002 w/ DCX hardeners (only) DCU2021 w/ DCX hardeners (only) DCU2042, DC3000, DCU2010, DC3010, DC4010	***Deltron:*** DCU2002, DCU2021, DCU2042 DCU2082, DC3000, DC4000, DCU2010, DC3010, DC4010
Global: D890, D8121, D8150	***Global:*** D890, D8121, D8150

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

Without DX57 or D888	With DX57 or D888
Requires 2.73 lbs/gal VOC clear or lower. Options include:	Requires 2.99 lbs/gal VOC clear or lower. Options include:
Deltron: DCU2010, DC3010, DC4010	***Deltron:*** DCU2010, DC3010, DC4010
Global: D8121	***Global:*** D8121

Technical Data:

	Without DX57 or D888	With DX57 or D888
Package* VOC Actual	5.72–5.89 lbs/gal (685–706 g/l)	5.72–5.89 lbs/gal (685–706 g/l)
Package* VOC Regulatory (Less Water Less Exempts)	5.72–5.89 lbs/gal (685–706 g/l)	5.72–5.89 lbs/gal (685–706 g/l)
1:1.5 RTS VOC Regulatory (Less Water Less Exempts)	6.51–6.55 lbs/gal (780–785 g/l)	5.99–6.03 lbs/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

**Package is Spectraflame VHWXX + DBC500 or D898*

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 VB04 *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
5 light coats or until desired color
Mix color 1 part to 1 part DBC500 or D895
Reduce 150% with DT885 or D872 or slower

VHW 2 MEDIUM SAPPHIRE
6 light coats or until desired color
Mix color 1 part to 1 part DBC 500 or D895
Reduce 150% with DT885 or D872 or slower

VHW 3 LIME GOLD
4 light coats or until desired color
Mix color 1 part to 11/2 parts DBC500 or D895
Reduce 150% with DT885 or D872 or slower

VHW 4 RICH YELLOW
6 light coats or until desired color
Mix color 1 part to 1 part DBC500 or D895
Reduce 150% with DT885 or D872 or slower

VHW 5 BRIGHT EMERALD
10 light coats or until desired color
Mix color 1 part to 1 part DBC500 or D895
Reduce 150% with DT885 or D872 or slower

VHW 6 ANTI-FREEZE GREEN
6 light coats or until desired color
Mix color 1 part to 1 part DBC500 or D895
Reduce 150% with DT885 or D872 or slower

VHW 7 ORANGE
8 light coats or until desired color
Mix color 1 part to 1 part DBC500 or D895
Reduce 150% with DT885 or D872 or slower

VHW 8 BRIGHT RED
8 light coats or until desired colorr
Mix color 1 part to 1 part DBC500 or D895
Reduce 150% with DT885 or D872 or slower

VHW 9 HOT WHEELS® BLUE
4 light coats or until desired color
Mix color 1 part to 1 part DBC500 or D895
Reduce 150% with DT885 or D872 or slower

VHW 10 HOT PINK
8 light coats or until desired color
Mix color 1 part to 1 part DBC500 or D895
Reduce 150% with DT885 or D872 or slower

VHW 11 LIGHT RED WATERMELON
4 light coats or until desired color
Mix color 1 part to 1 part DBC500 or D895
Reduce 150% with DT885 or D872 or slower

VHW 12 PURPLE
14 light coats or until desired color
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

Materials described are designed for application by professional, trained personnel using proper equipment and are not intended for sale to the public. Products mentioned may be hazardous and should only be used according to directions, while observing precautions and warning statements listed on label. Statements and methods described are based upon the best information and practices known to PPG Industries. Procedures for applications mentioned are suggestions only and are not to be construed as representations or warranties as to performance, results, or fitness for any intended use, nor does PPG Industries warrant freedom from patent infringement in the use of any formula or process set forth herein.

PPG Automotive Refinish

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