

# VB-15

# **Vibrance Collection Waterborne Midcoat**

# VWM5556

VWM5556 is an innovative waterborne midcoat for use with Envirobase<sup>®</sup> High Performance and Aquabase<sup>®</sup> Plus waterborne basecoats. VWM5556 creates a midcoat layer that can be applied over the waterborne basecoat and allows isolation of graphics when doing multiple colors especially when the custom finish may be done over an extended period of time. VWM5556 may also be tinted with Envirobase<sup>®</sup> High Performance or Aquabase<sup>®</sup> Plus toners, Vibrance powdered pearl or specialty flakes to create custom candy or pearl midcoat colors. VWM5556 may also be utilized as a blending clear or wet bed clear for the waterborne basecoat systems.

For durability and appearance, VWM5556 must be clearcoated with a refinish top coat clear. This product is not intended for use as a stand alone clear top coat.

VWM5556 is easy to use, and an essential tool for having full range, VOC-compliant capability in creating show-stopping, eye-catching custom finishes.



# **Compatible Surfaces**

### VWM5556 can be used with the systems shown below:

- EHP *Envirobase*<sup>®</sup> High Performance Follow Envirobase High Performance EB143 recommendations for proper preparation and compatible undercoats and topcoats
- Aquabase<sup>®</sup> Plus Follow Aquabase Plus PDS N5.3.2 recommendation for proper preparation and compatible undercoats and topcoats.





Use

Nh

#### Directions For **Preparation:**

When working on custom finishes pay close attention to the details outlined for standard basecoat preparation, sanding, and cleaning is needed to achieve the optimum results. When applying a color coat, be sure the ground coat has sufficiently flashed.

PPG color coats are designed to be applied over properly cleaned, sanded and primed surfaces. See the Compatibility list in EB143 (EHP) or PDS N5.3.2 (Aquabase Plus) for an

## Mix

		appropriate primer or sealer r	recommendation.					
Mixing Ratio:		Envirobase High Performance*						
-			Standard					
			<u>VWM5556</u> : <u>T494 / T595**</u>					
			4 : 1 Aquabase Plus*					
			Standard					
			<u>VWM5556</u> : <u>P980-5000 /5085**</u>					
			4 : 1 Converted					
		Converted VWM5556 will allow	<b>Converted</b> better protection of color coats and art work. It dries to a harder					
		finish than the 4 : 1 version and o	once cured, it will be easier to sand and may also be cleaned with					
		waterborne or solvent based cleaner with no adverse effects. * See table on page 4 for converted, mix by weight. ** T595 / P980-5085 thinners should only be used when temperatures are 100°F (38°C) or hotter with						
		humidity below 30%.						
		Apply 2 - 4 medium coats until desired appearance is achieved. Be sure to dry completely between coats using hand held air driers or other waterborne basecoat drying methods.						
		between coats using hand held air driers or other waterborne basecoat drying methods.						
			pply 1 coat to the blend area prior to basecoat application,					
			556 1:1 with the basecoat prior to blending.					
		Caution: In all cases, avoid	0					
	A	Pot life:	With 4 :1 Ratio         90 days           With 70:30:15:20 Ratio:         1 hour					
	⊗Ľ'		With Powdered Tints:4 hours					
Additives:		Custom Mixing VWM5556	<b>VM414x Flamboyance</b> 5% <sup>*</sup> max.shelf life 4 hours					
		with Vibrance Powdered	<b>VM410x Liquid Crystal</b> $5\%^*$ max.shelf life 4 hours					
	A B	Tints	<b>DX78 Prizmatique</b> 2% <sup>*</sup> max.shelf life 4 hours					
			NOTE: Do Not Use with Radiance II or Ditzler Big Flake *Percentage by weight					
Spraygun Set-up:		Fluid Tip:	1.2 - 1.4 mm or equivalent					
		HVLP	10 psi at the air cap					
		Conventional Film Build Per Wet Coat:	45 – 55 psi at the gun 1.0 – 1.5 mils					
			.7 - 1.0 mils					
Drying Times:		Film Build Per Dried Coat: Between Coats:	.7 – 1.0 mins					
Drying Times.		70°F (21°C)	2 - 5 minutes or until a uniform dull appearance is achieved					
	にごれ	Dust Free: $70^{\circ}F(21^{\circ}C)$	2 - 5 minutes or until a uniform dull appearance is achieved					
		70°F (21°C) Tack Free (4 : 1):	15 minutes					
		70°F (21°C)						
		Tack Free:(Converted): 70°F (21°C)	15 - 30 minutes					
		Tape Time (4 : 1): 70°F (21°C)	15 minutes					
		Tape Time (Converted): 70°F (21°C)	2 hours or bake for 20 minutes @ 140°F (60°C) metal temperature					
	_	Air Dry Time to Clearcoat: 70°F (21°C)	30 minutes or 60 minutes for converted at 70°F (21°C) depending on number of coats.					
		/	After 48 hours, the midcoat must be lightly abraded and an additional coat must be applied					
		Repair and Recoat	additional coat must be applied. Force dry @ 140°F (60°C) metal temp.and cooling cycle.					
		(4:1):	Light dry de-nibbing can be carried out after approximately					
	5	70°F (21°C)	15 minutes air dry @ 70°F (21°C). For cut through repairs, 16 hours or overnight @ 70°F (21°C).					
		Repair and Recoat	Force dry @ 140°F (60°C) metal temp.and cooling cycle. Light dry de-nibbing can be carried out after approximately					

(Converted):

70°F (21°C)

Light dry de-nibbing can be carried out after approximately

2 hours air dry @ 70°F (21°C). For cut through repairs, 16

hours or overnight @ 70°F (21°C).

# VWM5556

# **Directions For Use (Cont.)**

## **Clear Coating:**

VWM5556 colors must be clearcoated with a compatible Vibrance, Envirobase, Aquabase Plus, Deltron or Global clearcoat (see Envirobase High Performance EB-143 or Aquabase Plus PDS N5.3.2 for compatible clearcoats. Custom or exotic finishes are excluded from coverage under the PPG Paint Performance Guarantee.

Technical Data:	Film Build Per Wet Coat:	1.0 – 1.5 mils				
	Dried Film Build Per Coat:	.7 – 1.0 mils				
		VWM5556 :	VWM5556 Tinted* :	VWM5556 : T510 :	VWM5556 Tinted	
EHP RTS Combinations:		T494 or T595	T494 or T595	T581 : T494 or T595	:T510 : T581 :	
					T494 or T595	
Volume Ratio:		1:0.25	1:0.25	70:30:15:20	70:30:15:20	
Applicable Use Category		Color Coating	Color Coating	Color Coating	Color Coating	
VOC Actual (g/L)		43	43 - 49	89	89 - 93	
VOC Actual (lbs/gal)		0.36	0.36 - 0.41	0.74	0.74 - 0.77	
OC Regulatory (less water le	ess exempt) (g/L)	255	255 - 276	297	297 - 310	
OC Regulatory (less water le	ess exempt) (lbs/gal)	2.13	2.13 - 2.30	2.48	2.48 - 2.58	
Density (g/L)		997	996 - 1026	1004	1004 - 1023	
Density (lbs/gal)		8.32	8.31 - 8.55	8.38	8.38 - 8.54	
Volatiles wt. %		87.6	83.7 - 87.8	78.8	76.5 - 78.9	
Water wt. %		83.3	79.0 - 83.3	70.0	67.5 - 70.0	
Exempt wt. %		0.0	0.0	0.0	0.0	
Water vol. %		83.2	81.1 - 83.2	70.5	69.2 - 70.5	
Exempt vol. %		0.0	0.0	0.0	0.0	
Sq Ft. Coverage / U.S.gal.(1 n	nil. @ 100% transfer					
<b>cc</b> .:		195	193 - 218	316	316 - 335	
efficiency)		1)5	175 210	510		
VWM5556 Tinted represen	nts premixed blend of VWM5556 a	and colorant, containing		510		
VWM5556 Tinted represen	nts premixed blend of VWM5556 a XX pearlescent toner level of 15%	and colorant, containing.	ng a maximum			
VWM5556 Tinted represen amount of EHP T4xx / T4X	XX pearlescent toner level of 15%	and colorant, containin VWM5556 :	ng a maximum VWM5556 Tinted* :	VWM5556 :	VWM5556 Tinted*	
VWM5556 Tinted represen	XX pearlescent toner level of 15%	and colorant, containing.	ng a maximum	VWM5556 : P935-1135 :	VWM5556 Tinted* : P935-1135 :	
VWM5556 Tinted represen amount of EHP T4xx / T4X	XX pearlescent toner level of 15%	and colorant, containin VWM5556 :	ng a maximum VWM5556 Tinted* :	VWM5556 :	VWM5556 Tinted*	
VWM5556 Tinted represen amount of EHP T4xx / T4X	XX pearlescent toner level of 15%	and colorant, containin VWM5556 :	ng a maximum VWM5556 Tinted* :	VWM5556 : P935-1135 :	VWM5556 Tinted* : P935-1135 :	
VWM5556 Tinted represen amount of EHP T4xx / T4X	XX pearlescent toner level of 15%	and colorant, containin VWM5556 :	ng a maximum VWM5556 Tinted* :	VWM5556 : P935-1135 : P210-9120 :	VWM5556 Tinted* : P935-1135 : P210-9120 :	
* VWM5556 Tinted represen amount of EHP T4xx / T4XX ABP RTS Combinations	XX pearlescent toner level of 15%	und colorant, containin b. VWM5556 : P980-5000/5085	ng a maximum VWM5556 Tinted* : P980-5000/5085	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085	VWM5556 Tinted* : P935-1135 : P210-9120 : P980-5000/5085	
* VWM5556 Tinted represen amount of EHP T4xx / T4XX ABP RTS Combinations Volume Ratio:	XX pearlescent toner level of 15%	and colorant, containin  VWM5556 : P980-5000/5085 1 : 0.25	ng a maximum VWM5556 Tinted* : P980-5000/5085 1 : 0.25	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20	VWM5556 Tinted <sup>*</sup> : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20	
<ul> <li>WWM5556 Tinted represen amount of EHP T4xx / T4XX</li> <li>ABP RTS Combinations</li> <li>Volume Ratio: Applicable Use Category</li> </ul>	XX pearlescent toner level of 15%	und colorant, containin VWM5556 : P980-5000/5085 1 : 0.25 Color Coating	ng a maximum VWM5556 Tinted* : P980-5000/5085 1 : 0.25 Color Coating	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating	VWM5556 Tinted <sup>3</sup> : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating	
<ul> <li>VWM5556 Tinted represen amount of EHP T4xx / T4XX</li> <li>ABP RTS Combinations</li> <li>Volume Ratio: Applicable Use Category</li> <li>VOC Actual (g/L)</li> </ul>	XX pearlescent toner level of 15%	vwM5556 : P980-5000/5085 1 : 0.25 Color Coating 43	ng a maximum VWM5556 Tinted* : P980-5000/5085 1 : 0.25 Color Coating 43 - 49	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89	VWM5556 Tinted* : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 - 93	
* VWM5556 Tinted represen amount of EHP T4xx / T4X3 ABP RTS Combinations Volume Ratio: Applicable Use Category VOC Actual (g/L) VOC Actual (lbs/gal)	XX pearlescent toner level of 15%	and colorant, containin VWM5556 : P980-5000/5085 1 : 0.25 Color Coating 43 0.36	ng a maximum VWM5556 Tinted* : P980-5000/5085 1 : 0.25 Color Coating 43 - 49 0.36 - 0.41	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 0.74	VWM5556 Tinted* : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 - 93 0.74 - 0.77	
<ul> <li>VWM5556 Tinted represen amount of EHP T4xx / T4X3</li> <li>ABP RTS Combinations</li> <li>Volume Ratio: Applicable Use Category</li> <li>VOC Actual (g/L)</li> <li>VOC Actual (b/gal)</li> <li>VOC Regulatory (less water</li> </ul>	XX pearlescent toner level of 15%	and colorant, containin VWM5556 : P980-5000/5085 1 : 0.25 Color Coating 43 0.36 255	ng a maximum VWM5556 Tinted* : P980-5000/5085 1 : 0.25 Color Coating 43 - 49 0.36 - 0.41 255 - 276	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 0.74 297	VWM5556 Tinted* : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 - 93 0.74 - 0.77 297 - 310	
* VWM5556 Tinted represen amount of EHP T4xx / T4X3 ABP RTS Combinations Volume Ratio: Applicable Use Category VOC Actual (g/L) VOC Actual (lbs/gal) VOC Regulatory (less water VOC Regulatory (less water	XX pearlescent toner level of 15%	and colorant, containin VWM5556 : P980-5000/5085 1 : 0.25 Color Coating 43 0.36 255 2.13	ng a maximum VWM5556 Tinted* : P980-5000/5085 Color Coating 43 - 49 0.36 - 0.41 255 - 276 2.13 - 2.30	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 0.74 297 2.48	VWM5556 Tinted* : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 - 93 0.74 - 0.77 297 - 310 2.48 - 2.58	
VWM5556 Tinted represen amount of EHP T4xx / T4X3 ABP RTS Combinations Volume Ratio: Applicable Use Category VOC Actual (g/L) VOC Actual (lbs/gal) VOC Regulatory (less water VOC Regulatory (less water Density (g/L)	XX pearlescent toner level of 15%	and colorant, containin VWM5556 : P980-5000/5085 1 : 0.25 Color Coating 43 0.36 255 2.13 997	ng a maximum VWM5556 Tinted* : P980-5000/5085 1 : 0.25 Color Coating 43 - 49 0.36 - 0.41 255 - 276 2.13 - 2.30 996 - 1026	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 0.74 297 2.48 1004	VWM5556 Tinted* : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 - 93 0.74 - 0.77 297 - 310 2.48 - 2.58 1004 - 1023	
VWM5556 Tinted represen amount of EHP T4xx / T4XX ABP RTS Combinations Volume Ratio: Applicable Use Category VOC Actual (g/L) VOC Actual (lbs/gal) VOC Regulatory (less water VOC Regulatory (less water Density (g/L) Density (lbs/gal)	XX pearlescent toner level of 15%	and colorant, containin VWM5556 : P980-5000/5085 1 : 0.25 Color Coating 43 0.36 255 2.13 997 8.32	ng a maximum VWM5556 Tinted* : P980-5000/5085 1 : 0.25 Color Coating 43 - 49 0.36 - 0.41 255 - 276 2.13 - 2.30 996 - 1026 8.31 - 8.55	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 0.74 297 2.48 1004 8.38	VWM5556 Tinted <sup>4</sup> : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 - 93 0.74 - 0.77 297 - 310 2.48 - 2.58 1004 - 1023 8.38 - 8.54	
VWM5556 Tinted represen amount of EHP T4xx / T4XX <b>ABP RTS Combinations</b> Volume Ratio: Applicable Use Category VOC Actual (g/L) VOC Actual (lbs/gal) VOC Regulatory (less water Density (g/L) Density (lbs/gal) Volatiles wt. %	XX pearlescent toner level of 15%	nd colorant, containin VWM5556 : P980-5000/5085 1 : 0.25 Color Coating 43 0.36 255 2.13 997 8.32 87.6	ng a maximum VWM5556 Tinted* : P980-5000/5085 Color Coating 43 - 49 0.36 - 0.41 255 - 276 2.13 - 2.30 996 - 1026 8.31 - 8.55 83.7 - 87.8	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 0.74 297 2.48 1004 8.38 78.8	VWM5556 Tinted <sup>4</sup> : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 - 93 0.74 - 0.77 297 - 310 2.48 - 2.58 1004 - 1023 8.38 - 8.54 76.5 - 78.9	
VWM5556 Tinted represen amount of EHP T4xx / T4XX ABP RTS Combinations Volume Ratio: Applicable Use Category VOC Actual (g/L) VOC Actual (lbs/gal) VOC Regulatory (less water VOC Regulatory (less water Density (g/L) Density (lbs/gal) Volatiles wt. % Water wt. %	XX pearlescent toner level of 15%	and colorant, containin VWM5556 : P980-5000/5085 1 : 0.25 Color Coating 43 0.36 255 2.13 997 8.32 87.6 83.3	ng a maximum VWM5556 Tinted* : P980-5000/5085 Color Coating 43 - 49 0.36 - 0.41 255 - 276 2.13 - 2.30 996 - 1026 8.31 - 8.55 83.7 - 87.8 79.0 - 83.3	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 0.74 297 2.48 1004 8.38 78.8 70.0	VWM5556 Tinted* : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 - 93 0.74 - 0.77 297 - 310 2.48 - 2.58 1004 - 1023 8.38 - 8.54 76.5 - 78.9 67.5 - 70.0	
VWM5556 Tinted represen amount of EHP T4xx / T4XX <b>ABP RTS Combinations</b> Volume Ratio: Applicable Use Category VOC Actual (g/L) VOC Actual (lbs/gal) VOC Regulatory (less water VOC Regulatory (less water VOC Regulatory (less water Density (g/L) Density (lbs/gal) Volatiles wt. % Water wt. %	XX pearlescent toner level of 15%	and colorant, containin VWM5556 : P980-5000/5085 1 : 0.25 Color Coating 43 0.36 255 2.13 997 8.32 87.6 83.3 0.0	ng a maximum VWM5556 Tinted* : P980-5000/5085 Color Coating 43 - 49 0.36 - 0.41 255 - 276 2.13 - 2.30 996 - 1026 8.31 - 8.55 83.7 - 87.8 79.0 - 83.3 0.0	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 0.74 297 2.48 1004 8.38 78.8 70.0 0.0	VWM5556 Tinted* : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 - 93 0.74 - 0.77 297 - 310 2.48 - 2.58 1004 - 1023 8.38 - 8.54 76.5 - 78.9 67.5 - 70.0 0.0	
VWM5556 Tinted represen amount of EHP T4xx / T4X3 ABP RTS Combinations Volume Ratio: Applicable Use Category VOC Actual (g/L) VOC Actual (g/L) VOC Actual (lbs/gal) VOC Regulatory (less water VOC Regulatory (less water VOC Regulatory (less water Density (g/L) Density (lbs/gal) Volatiles wt. % Water wt. % Water vt. %	XX pearlescent toner level of 15%	and colorant, containin VWM5556 : P980-5000/5085 1 : 0.25 Color Coating 43 0.36 255 2.13 997 8.32 87.6 83.3 0.0 83.2	ng a maximum VWM5556 Tinted* : P980-5000/5085 Color Coating 43 - 49 0.36 - 0.41 255 - 276 2.13 - 2.30 996 - 1026 8.31 - 8.55 83.7 - 87.8 79.0 - 83.3 0.0 81.1 - 83.2	VWM5556 : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 0.74 297 2.48 1004 8.38 78.8 70.0 0.0 70.5	VWM5556 Tinted <sup>3</sup> : P935-1135 : P210-9120 : P980-5000/5085 70 : 30 : 15 :20 Color Coating 89 - 93 0.74 - 0.77 297 - 310 2.48 - 2.58 1004 - 1023 8.38 - 8.54 76.5 - 78.9 67.5 - 70.0 0.0 69.2 - 70.5	

amount of ABP P999 / T4XXX pearlescent toner level of 15%.

# VWM5556

# **Directions For Use (Cont.)**

### Un-activated mixing on a Scale:

Use the table below to mix VWM5556 un-converted, un-activated cumulative in parts. If tinting, add tint to VWM5556 before thinning.

Product	4 oz.	8 oz.	12 oz.	16 oz.	20 oz.	24 oz.
Envirobase High Performance						
VWM5556*	107	214	321	428	535	642
T494/595	134	267	401	535	668	802
Aquabase Plus						
VWM5556*	107	214	321	428	535	642
P980-5000/5085	134	267	401	535	668	802

# Converted / activated mixing on the scale:

Use the table below to mix VWM5556 as a converted color with the addition of the appropriate Envirobase or Aquabase Plus components listed. If tinting, add tint to VWM5556 before converting, activating and thinning. For mixing accuracy, these ratios should be mixed on a scale by weight. cumulative in parts.

Product		4 oz.	8 oz.	12 oz.	16 oz.	20 oz.	24 oz.
irobase High Performan	ce						
VWM5556*	70 parts	70	140	210	280	350	420
T510	30 parts	100	200	300	400	500	600
T581	15 parts	115	230	345	460	575	690
T494/595	20 parts	135	270	405	540	675	810
Aquabase Plus							
VW M5556*	70 parts	70	140	210	280	350	420
P935-1135	30 parts	100	200	300	400	500	600
P210-9120	15 parts	115	230	345	460	575	690
P980-5000/5085	20 parts	135	270	405	540	675	810

## 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 Industries 19699 Progress Drive Strongsville, OH 44149 1-800-647-6050

PPG Canada Inc. 2301 Royal Windsor Drive Unit #6 Mississauga, Ontario L5J 1K5 1-888-310-4767