

# Improved Dispersions for Bismuth Vanadate

with **Borchi<sup>®</sup> Gen 1757** Dispersant



**Low and flowable viscosity, very small particle size, great color development**

## Grind Formulations with Various Bismuth Vanadate (BV) Grades

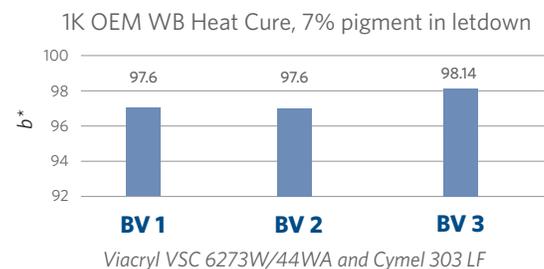
	Material	Supplier	BV 1	BV 2	BV 3
<b>Borchi<sup>®</sup> Gen 1757 (100%)</b>	Dispersant	Milliken	6.50	6.50	6.50
Borchi <sup>®</sup> Gel PN	Rheology Modifier	Milliken	0.50	0.50	0.50
Borchers <sup>®</sup> AF 1171	Defoamer	Milliken	0.50	0.50	0.50
Deionized Water	Solvent	—	27.50	27.50	27.50
Pigment (BV 1)	Bismuth Vanadate (PY 184)	—	65.00	—	—
Pigment (BV 2)			—	65.00	—
Pigment (BV 3)			—	—	65.00
<b>TOTAL</b>			<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
DOP			10%	10%	10%

Media: Glass beads | Media size: 2 mm | Media amount: 150 g | Time: 1h in Lau shaker

## Smaller Particle Sizes µm

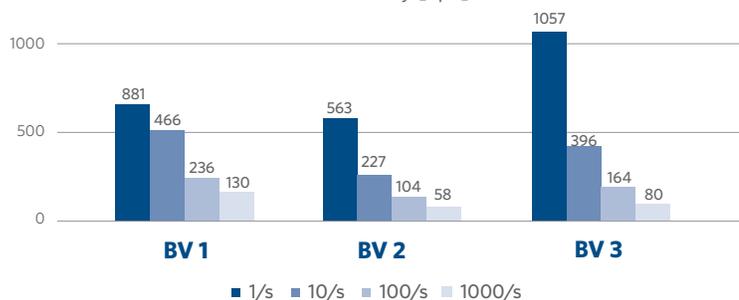


## High b\* Values

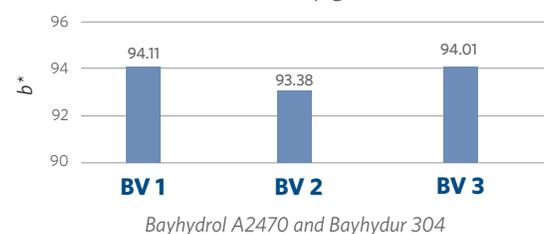


## Low and Flowable Viscosity

Initial Viscosity [cps]



2K PU WB Varnish, 3% pigment in letdown



Formulation for high pigment loading on reverse side →

# Low Dispersant Dosage & Very High Pigment Loading

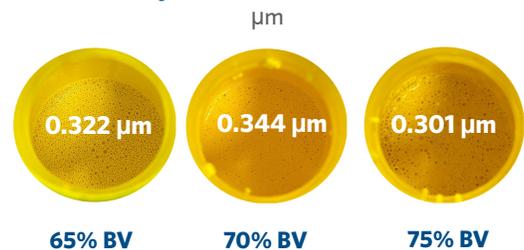
with **Borchi<sup>®</sup> Gen 1757** Dispersant & **AL-52360** Bismuth Vanadate Pigment

## Bismuth Vanadate (BV) Grind Formulation

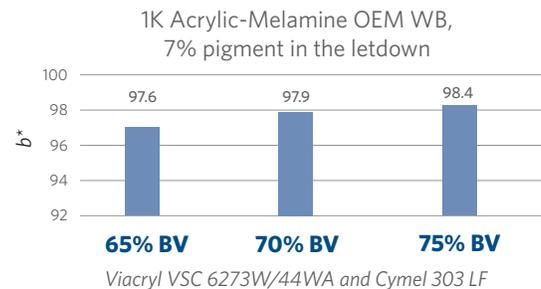
	Material	Supplier	STANDARD PIGMENT LOADING → HIGHER PIGMENT LOADING		
			65% BV	70% BV	75% BV
<b>Borchi<sup>®</sup> Gen 1757 (100%)</b>	Dispersant	Milliken	3.25	3.50	3.75
Borchi <sup>®</sup> Gel PN	Rheology Modifier	Milliken	0.50	0.50	0.50
Borchers <sup>®</sup> AF 1171	Defoamer	Milliken	0.50	0.50	0.50
Deionized Water	Solvent	—	30.75	25.50	20.25
<b>AL-52360</b>	Bismuth Vanadate (PY 184)	Alfarben	65.00	70.00	75.00
<b>TOTAL</b>			<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
DOP			5%	5%	5%

Media: Glass beads | Media size: 2 mm | Media amount: 150 g | Time: 1h in Lau shaker

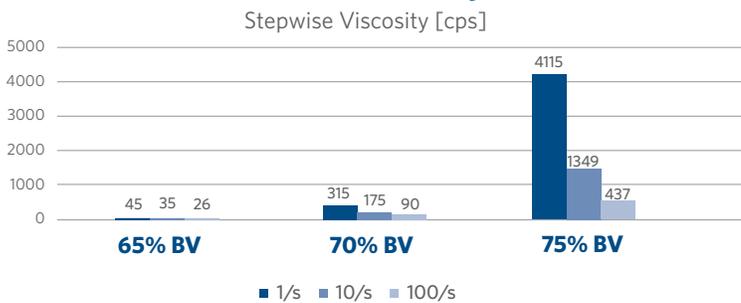
## Very Small Particle Sizes



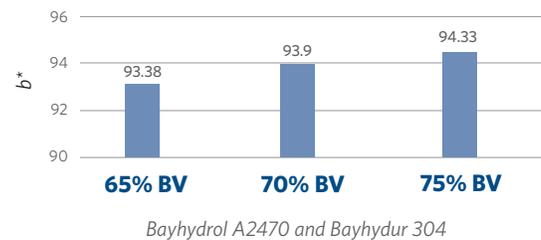
## High b\* Values



## Flowable Viscosity



## 2K PU Varnish WB, 3% pigment in the letdown



For more information, please reach us at [borchers.com/contact](https://www.borchers.com/contact)

PLEASE NOTE: As each customer's use of our product may be different, information we provide, including without limitation, recommendations, test results, samples, care/labeling/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test and be responsible for its own specific use, further processing, labeling, marketing, etc. All sales are exclusively subject to our standard terms of sale posted at [www.milliken.com/terms](http://www.milliken.com/terms) (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing. Borchi is a trademark of Borchers Americas.

BORBYYH-022025

Milliken<sup>™</sup>