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# VANDERBILT

## Minerals Formula

Formula 103013

**Water-Reducible Alkyd Black Gloss Corrosion Inhibitive Dip Enamel**  
**VEEGUM® R<sup>1</sup> Magnesium Aluminum Silicate, ACTIV-8® HGL<sup>1</sup> Drier Accelerator and Stabilizer**

	Pounds	Gallons	Kilograms	Liters
<b>GRIND</b>				
Kelsol® 3961-B2G-75 WR Alkyd Resin <sup>2</sup>	70.0	7.9	13.26	12.63
Butyl Cellosolve <sup>®3</sup>	7.5	1.0	1.42	1.58
<b>VEEGUM® R<sup>1</sup> Magnesium Aluminum Silicate</b>	5.0	0.2	0.95	0.36
Raven® H2O Carbon Black <sup>4</sup>	11.5	0.8	2.18	1.21
JO 855 Zinc Phosphate <sup>5</sup>	30.0	1.1	5.69	1.77
Drewplus® L 475 <sup>6</sup>	2.0	0.3	0.38	0.42
28% Ammonium Hydroxide	2.0	0.3	0.38	0.41
Triethanolamine	1.5	0.3	0.28	0.39
Distilled Water	121.5	14.5	23.02	23.02

*Measure pH and adjust to 8.0 to 8.5 with 28% Ammonium Hydroxide.*

*Ball Mill for 1 hour.*

*Transfer to Let Down tank.*

### LET DOWN

Kelsol® 3961-B2G-75 WR Alkyd Resin <sup>2</sup>	180.0	20.5	17.05	16.24
Butyl Cellosolve <sup>®3</sup>	39.0	5.2	3.70	4.10
<i>Premix the next 5 items and add.</i>				
Butyl Carbitol <sup>®3</sup>	5.0	0.6	0.47	0.50
<b>ACTIV-8® HGL<sup>1</sup> Drier Accelerator and Stabilizer</b>	1.6	0.2	0.13	0.14
Mn Hydrocure <sup>® II<sup>1</sup></sup>	1.4	0.2	0.15	0.15
Co Hydrocure <sup>® II<sup>7</sup></sup>	2.3	0.3	0.22	0.24
Skino <sup>® No 2<sup>7</sup></sup>	2.4	0.3	0.23	0.25
Surfynol <sup>® 104 BC<sup>8</sup></sup>	2.0	0.3	0.19	0.21
28% Ammonium Hydroxide	8.0	1.1	0.76	0.82
Distilled Water	375.5	45.0	35.58	35.58

*Measure pH and adjust to 8.0 to 8.5 with 28% Ammonium Hydroxide.*

*Mix at slow speed for 10 minutes.*

<b>TOTALS</b>	868.2	100.1	106.04	100.02
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### PAINT PROPERTIES

Density	8.7 lbs/gal	1.06 g/cc
% Solids by weight	27	
% Solids by volume	22	
PVC	8.6	
Pigment to binder ratio	0.10:1	
Calculated VOC	2.93 lbs/gal	350 g/L

### RAW MATERIAL SUPPLIERS

- <sup>1</sup> Vanderbilt Minerals, LLC, Norwalk, CT
- <sup>2</sup> Reichhold Incorporated, Research Triangle Park, NC
- <sup>3</sup> Dow Chemical Company, Midland, MI
- <sup>4</sup> Columbian Chemicals Company, Marietta, GA
- <sup>5</sup> Rockwood Pigments NA Incorporated, Beltsville, MD
- <sup>6</sup> Ashland Specialty Chemical Company, Columbus, OH
- <sup>7</sup> OM Group, Incorporated, Cleveland, OH
- <sup>8</sup> Air Products and Chemicals, Allentown, PA

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