

Starting Formulation

SF 2010

Flat Black Enamel

EPON™ Resin 1007F / Beetle 227-8

- Features
- Stable flat black enamel
 - Exceptional package stability

Formula	<u>Material</u>	<u>Supplier</u>	<u>Pounds</u>	<u>Gallons</u>
Part A - Grind Charge (Ball Mill)				
Pigments				
	Raven 22 Powder	Columbian Chemicals Co.	11.7	0.78
	Celite 281	Manville Filtration & Minerals	125.2	6.51
	EPON Resin 1007F solution	Hexion		
	EPON Resin 1007-JX-55	Hexion	265.3	30.15
	Ethyl 3-ethoxy propionate	Eastman Chemical Products, Inc.	100.6	12.85
	Xylene		<u>92.1</u>	<u>12.85</u>
	Total Part A		594.9	63.14
Part B - Letdown (In Mill)				
Urea Resin and Solvents				
	Beetle 227-8	Cytec Industries	120.3	14.49
	Propylene glycol methyl ether acetate		76.5	9.52
	Xylene		<u>79.1</u>	<u>11.04</u>
	Total Part B		275.9	35.05
Part C - Silicone Oil Addition				
	Dow-Corning 200 Fluid Solution (1.0% nonvolatile in Ethyl 3-ethoxy propionate/toluene; 1/1 by weight)		-	-
			-	-
			<u>13.5</u>	<u>1.81</u>
	Total Part C		13.5	1.81
	Total Part A & B & C		884.3	100.00

Generated: October 21, 2021
 Issue Date:
 Revision:

© and ™ Licensed trademarks of Hexion Inc.

DISCLAIMER

The information provided herein was believed by Hexion Inc. ("Hexion") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Hexion are subject to Hexion's terms and conditions of sale. HEXION MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY HEXION, except that the product shall conform to Hexion's specifications. Nothing contained herein constitutes an offer for the sale of any product.

Mixing Instructions

	-	-
	<u>Pounds</u>	<u>Gallons</u>
Part A	594.9	63.14
Part B	275.9	35.05
Part C	<u>13.5</u>	<u>1.81</u>
Part A + B + C	884.3	100.00

Charge the pigments, EPON Resin 1007F and solvents to a steel ball mill, and grind the mixture for at least 16 hours to a North Standard fineness of 7-8. Let down in the mill with the Beetle 227-8 and remaining solvents. The silicone oil addition should be made in a separate mixing tank to avoid contamination of the mill.

Typical Handling Properties The finished paint formulation should have a viscosity suitable for spray application with no additional letdown. Should a lower viscosity be desired, thin with a 1/1 by weight blend of ethyl 3-ethoxy propionate/xylene.

This coating system should be baked for 20 minutes at 385 °F.

Typical Formulation Properties

	<u>Units</u>	<u>Value</u>
EPON Resin 1007F/Beetle 227-8 ratio (solids)	By weight	70/30
Nonvolatile content by weight	%	39.0
Weight per gallon	lb/gal	8.8
Pigment : Binder Weight Ratio		0.4/0.6
Pigment volume concentration (PVC)	%	25.7
Volatile Organic Compound (VOC)	lb/gal	5.39
	g/L	647
Gloss, 60 degrees		12

General Information

These are starting formulations and are not proven in the user's particular application but are simply meant to demonstrate the efficacy of the products and to assist in the development of the user's own formulation. It is the user's responsibility to fully-test and qualify the formulation, along with the ingredients, methods, applications or equipment identified herein ("Information"), by the user's knowledgeable formulator or scientist, and to determine the appropriate use conditions and legal restrictions, prior to use of any Information.

Safety, Storage & Handling

Please refer to the MSDS for the most current Safety and Handling information.

Exposure to these materials should be minimized and avoided, if feasible, through the observance of proper precautions, use of appropriate engineering controls and proper personal protective clothing and equipment, and adherence to proper handling procedures. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheet (MSDS) for these and all other products being used are understood by all persons who will work with them. Questions and requests for information on Hexion Inc. ("Hexion") products should be directed to your Hexion sales representative, or the nearest Hexion sales office. Information and MSDSs on non-Hexion products should be obtained from the respective manufacturer.

Generated: October 21, 2021
Issue Date:
Revision:

® and ™ Licensed trademarks of Hexion Inc.

DISCLAIMER

The information provided herein was believed by Hexion Inc. ("Hexion") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Hexion are subject to Hexion's terms and conditions of sale. HEXION MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY HEXION, except that the product shall conform to Hexion's specifications. Nothing contained herein constitutes an offer for the sale of any product.

Contact Information

For product prices, availability, or order placement, please contact customer service:

www.hexion.com/Contacts/

For literature and technical assistance, visit our website at www.hexion.com

Generated: October 21, 2021
Issue Date:
Revision:

® and ™ Licensed trademarks of Hexion Inc.

DISCLAIMER

The information provided herein was believed by Hexion Inc. ("Hexion") to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. All products supplied by Hexion are subject to Hexion's terms and conditions of sale. HEXION MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE OR CONCERNING THE ACCURACY OF ANY INFORMATION PROVIDED BY HEXION, except that the product shall conform to Hexion's specifications. Nothing contained herein constitutes an offer for the sale of any product.