ACTIV-8® AND ACTIV-8® HGL

Drier Stabilizer and Accelerator



TECHNICAL DATA

ACTIV-8 and **ACTIV-8 HGL** are drier accelerators and stabilizers when used with metal driers in waterborne and solvent-borne paints and coatings. **ACTIV-8** and **ACTIV-8 HGL** are solutions of the chelating agent 1,10-phenanthroline.

TYPICAL COMPOSITION

	ACTIV-8		ACTIV-8 HGL	
	by wt.	by vol.	by wt.	by vol.
1,10-phenanthroline	38%	28%	38%	31%
n-butanol	52%	61%	-	-
2-ethylhexoic acid	10%	11%	-	-
hexylene glycol	-	-	62%	69%

TYPICAL PROPERTIES -

	ACTIV-8	ACTIV-8 HGL
Density at 25 °C (Mg/m³)	0.95	1.03
Weight/gallon (Lbs/gal)	7.89	8.59
Flash point, °F/°C	97/36	211/99
Volatile Organic Content	4.1 lbs/gal 492 g/L	5.3 lbs/gal 636 g/L

- APPLICATIONS —

ACTIV-8 and **ACTIV-8 HGL** are used in combination with manganese and/or cobalt driers in coatings that cure by oxidative polymerization to improve dry times. In general, **ACTIV-8** is used in solvent-borne coatings and **ACTIV-8 HGL** is used in waterborne coatings. Long term aging stability is also improved, especially in waterborne coatings where loss-of-dry often occurs.

DRIER RECOMMENDATIONS –

- For waterborne coatings it is recommended to use 0.1-0.25% **ACTIV-8 HGL**, based on resin solids, in combinations with cobalt or manganese driers such that there is a 5 to 1 ratio of **ACTIV-8 HGL** to metal drier.
- For solvent-borne coatings it is recommended to use 0.2-0.5% ACTIV-8, based on resin solids, in combinations with cobalt or manganese driers such that there is a 10 to 1 ratio of ACTIV-8 to metal drier.
- For the best overall combined performance of drying, long term loss-of-dry stability, and color, it is recommended that the driers and ACTIV-8 be preblended in a suitable solvent. Preblending, in the absence of competitive substances, allows for the proper chelation of 1,10-phenanthroline with the drier metal.
- For a detailed explanation of how to determine the quantities of ACTIV-8 or ACTIV-8
 HGL to be used in a coating, as well as information on drier preblends, consult the
 "How-to" Guide for the Use of ACTIV-8 on the Vanderbilt Minerals, LLC website.



To maintain product quality, protect from freezing which can cause crystallization. If crystallization occurs, gently warm the product to dissolve the crystals.

ACTIV-8 and **ACTIV-8 HGL** will react with iron causing a reddish discoloration to white and light-colored paints. Care should be taken to insure **ACTIV-8** and **ACTIV-8 HGL**, do not come in contact with iron contaminants and are stored in lined metal containers.

Zinc in the form of zinc drier, zinc phosphate or zinc oxide blocks the activity of **ACTIV-8** and **ACTIV-8 HGL**. If **ACTIV-8** or **ACTIV-8 HGL** is to be used in a coating containing zinc, preblend **ACITV-8** or **ACITV-8 HGL** with the metal drier prior to exposure to zinc to allow for proper chelation.

CONTACT INFORMATION

For samples, product information and/or technical service please contact Vanderbilt Minerals, LLC or the Vanderbilt representative in your area:

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