



Acrylic Hybrids from Rohm and Haas



Primal™ HG-1000

NEW HYBRID BINDER FOR LOW VOC DECORATIVE COATINGS



Despite tightening VOC regulations, solvent based alkyds remain popular in Europe due to certain key properties like extended open time, superb flow and leveling and high gloss potential. They have deficiencies however such as relatively poor durability, film yellowing and solvent odor as well as an unfavourable environmental, health and safety profile.

Primal™ HG-1000, containing the new Hydrotech™ technology, represents a breakthrough in low VOC decorative coatings with an outstanding improvement in open-time performance. This new water-borne acrylic hybrid polymer dispersion is suitable for use in low VOC gloss and semi-gloss decorative coatings. It provides a much sought-after balance of application and film properties.

Key Characteristics:

- Improved open-time compared to traditional acrylic emulsions
- Excellent gloss potential
- Good flow and levelling
- Little or no yellowing, better than alkyds
- Good exterior durability
- Compliant with 2010 VOC directive

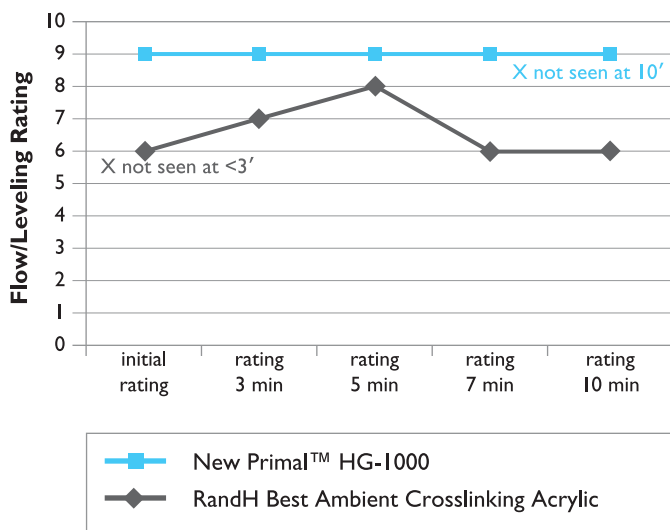


This new technology does not require the use of cobalt driers to develop its dry film properties. It is designed to be suitable for both interior and exterior applications, and relevant for both DIY and professional audiences.

Open Time, X-Test

Flow & Leveling and Open Time Results using X-Test in Gloss Formulations

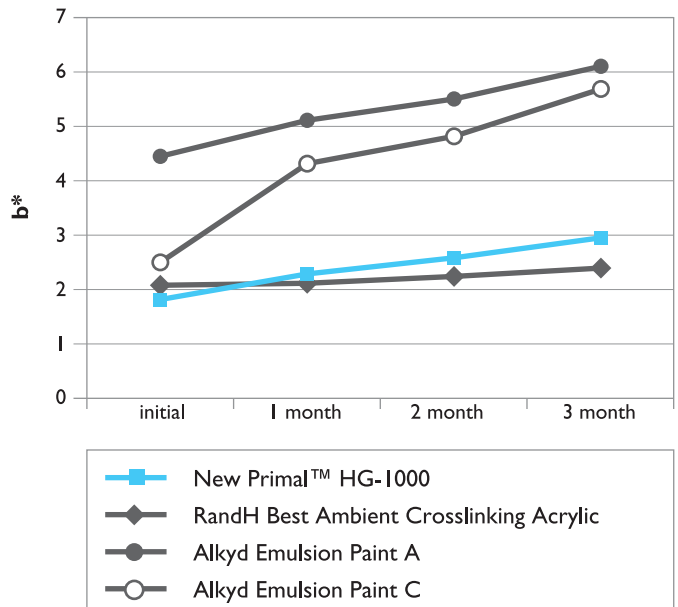
X-Test (10= best)



Low Yellowing Characteristics

Yellowing Resistance Unexposed to Light

Yellowing results. b^* vs time, unexposed to light



Gloss/Hardness Balance

Gloss Formulation with New Primal™ HG-1000
(18% TiO₂ PVC, 38% volume solids)

Gloss 20°	71
Gloss 60°	85
Konig hardness (sec)	
1 day	20
7 days	34
30 days	56

Note: properties measured on glass plates, 100 micron wet paint.

Technical Specifications

Physical Properties

Emulsion Property	
% Total Solids	46.5 - 47.5
Particle Size, nm	90 - 110
pH	8.0 - 9.0
Minimum Film Forming Temp °C	25 - 30

Make sure that Primal™ HG-1000 with new Hydrotech™ technology is in your formulations.

For more information on how Primal™ HG-1000 can help you, contact your local Rohm and Haas representative.

SAFE HANDLING INFORMATION

Rohm and Haas maintains comprehensive and up-to-date material safety data sheets (MSDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Rohm and Haas recommends that you obtain copies of our material safety data sheets from your local Rohm and Haas representative on each of our products prior to its use in your facilities. We also suggest that you contact your supplier of other materials recommended for use with our products for appropriate health and safety precautions prior to their use. These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of our products are beyond our control. We recommend that the prospective user determines the suitability of our materials and suggestions before adopting them on a commercial scale. Suggestions for uses of our products or the inclusion of descriptive material from patents and the citation of specific patents in this publication should not be understood as recommending the use of our products in violation of any patent or as permission or license to use any patents of the Rohm and Haas Company.

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