

REVISION DATE: 02/19/2016

**TECHNICAL BRIEF #1  
ACCELERATED WEATHERING DATA : Q-UVA**

Isocryl H-1871 is a weatherable, hydroxyl acrylic for gloss modification of polyurethane powder coating formulations. The data presented here is based on laboratory testing, and is provided for informational purposes only. No expression of warranty is implied. Weatherability should be determined by the user for any particular formulation.

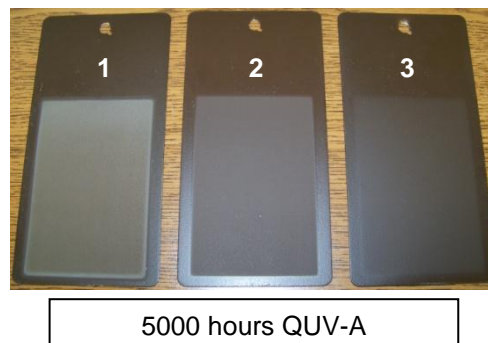
<b>FORMULATIONS</b>	<b>1</b>	<b>2</b>	<b>3</b>
Rucote 102	29.70		
Crylcoat 4890-0		30.35	30.35
Isocryl H-1871	29.70	30.35	30.35
Crelan Ni-2	10.40	9.10	9.10
Butaflow BT-71	0.20	0.20	0.20
Resiflow P-64F	1.00	1.00	1.00
Benzoin	0.50	0.50	0.50
Sachtofine P, Sachtleben	10.00	10.00	10.00
Bayferrox 130BM	4.25	4.25	4.25
Bayferrox 3950	13.25	13.25	13.25
Monarch 800, Cabot	1.00	1.00	1.00
Tinuvin 928			1.40
Tinuvin 144			0.70
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>102.10</b>

**Cycle settings:**

1. UV-A (340nm), 8 hours, 70°C
2. Condensation, 4 hours, 50°C

**Testing with polyesters:**

1. Standard durable
2. Superdurable
3. Superdurable with additives

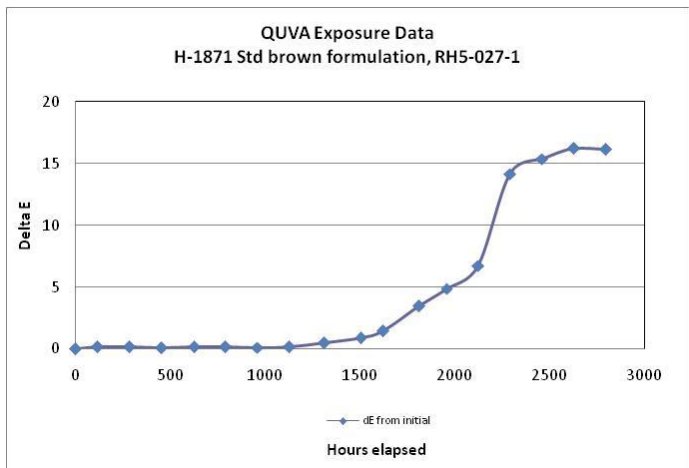
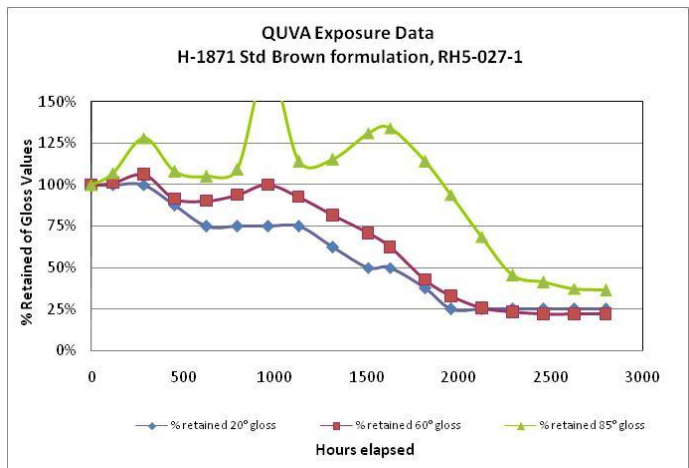
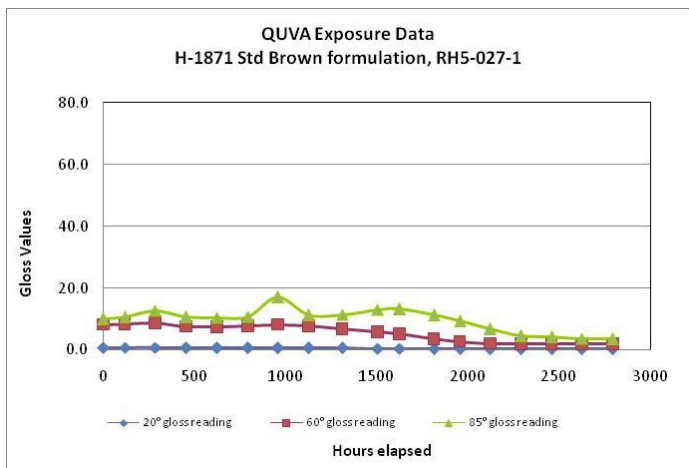


**Summary:**

The first formulation with the standard durable polyester reached failure point of dropping to 50% of original 60° gloss after approximately 1700 hours exposure. However, the use of superdurable polyester in combination with Isocryl H-1871 extends the failure point to approximately 3500 hours with exceptional Delta E readings. The exposure testing for the third formulation that incorporated a UV absorber and a HALS additive continued to maintain a durable finish for 5000 hours of exposure, when it reached the 50% mark of original 60° gloss.

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**Results using Isocryl H-1871 with a Standard Durable Polyester**



**ISOCRYL® H-1871  
MATTING ACRYLIC RESIN  
FOR POWDER COATINGS**

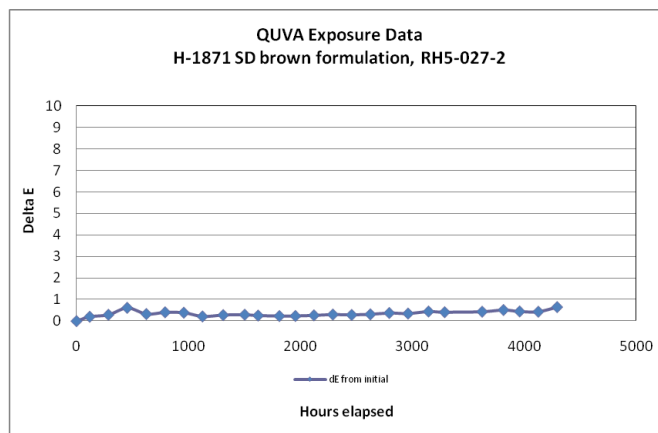
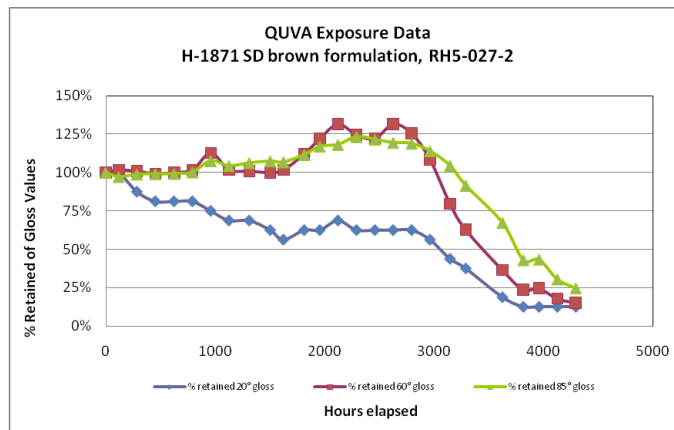
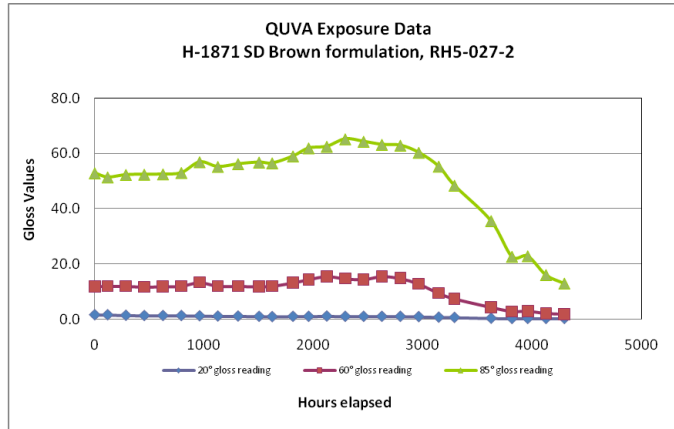
*Experimental Product*



THE EDGE OF INNOVATION

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**Results using Isocryl H-1871 with a Superdurable Polyester**



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**ISOCRYL® H-1871  
MATTING ACRYLIC RESIN  
FOR POWDER COATINGS**

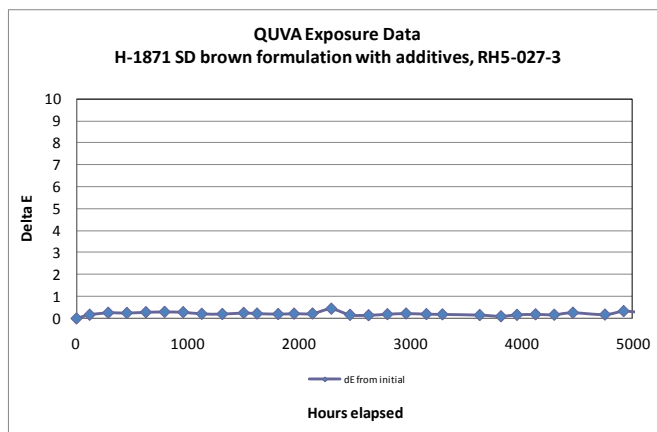
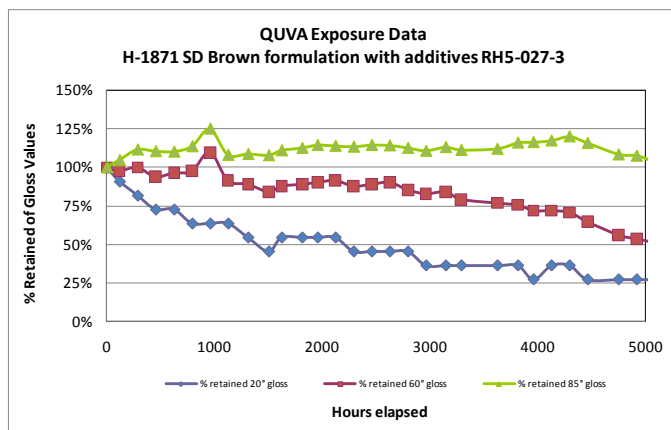
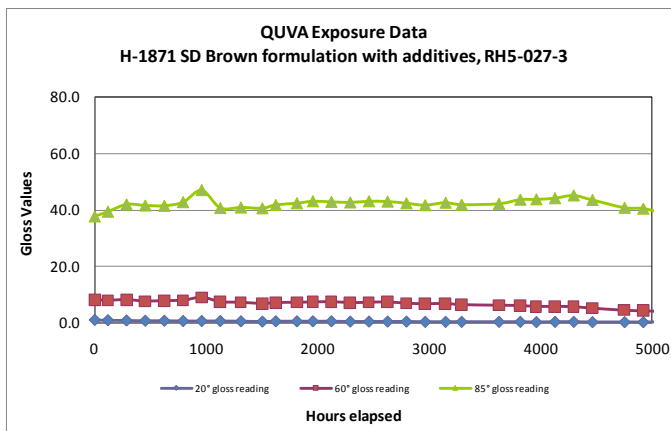
*Experimental Product*



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**Results using Isocryl H-1871 with a Superdurable Polyester and UV Additives**



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