



Laboratory Test Project

-Swimming (Chlorine) Water Resistant Test Report

Formation: Longchang Xiao

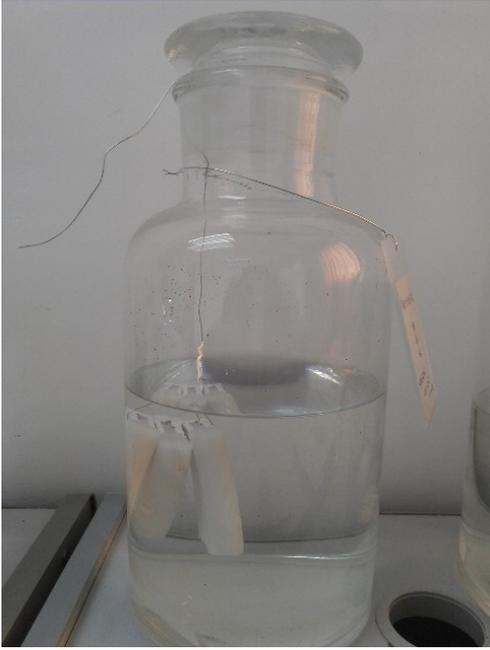
Verification: Quanzhu Guo

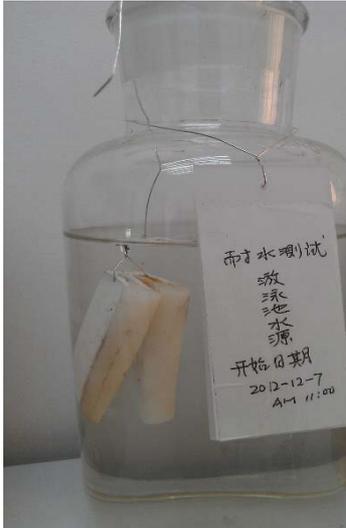
Approval:

Department: R&D of VARDAflex Neon Tube

Date: 2013.03.07

Test Project: Swimming (Chlorine) Water Resistant

Test Equipment	Glass jar+ Swimming water	
		
Test Purpose	Verify swimming water resistant performance of PVC and observe variation of PVC when product is immersed under swimming water completely	
Test Condition	<ol style="list-style-type: none"> 1. Product is immersed under swimming water completely 2. Product is in static state 	
Test Environment	<ol style="list-style-type: none"> 1. Normal temperature 2. Indoor environment 	
Test Photo	Example Photos	Remark
		<p>Initial state of first immersion and initial state of not immersion</p>

			<p>States in water and outside water after 88 days' immersion</p>																		
<p>Test Method</p>	<ol style="list-style-type: none"> 1. Prepare samples and make sure they're from the same batch. 2. Select 4PCS 10CM samples. 3. Take photos of 4PCS samples before immersion, and keep 2PCS samples of not immersion as comparison, and record color and appearance features of another 2PCS samples before immersion. 4. Record color changing and appearance features of samples immersed under swimming water every 4 days. 5. Keeping test until obvious changes of product color and appearance. 6. Record cycle period of changes of color and appearance. 																				
<p>Test Conclusion</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Conclusion Description</th> </tr> </thead> <tbody> <tr> <td style="width: 30%;">First test</td> <td>Color and appearance has no change</td> </tr> <tr> <td>On 12th day</td> <td>Color shows a little slight yellowing</td> </tr> <tr> <td>On 20th day</td> <td>Color shows a little further yellowing</td> </tr> <tr> <td>On 28th day</td> <td>Color shows further yellowing</td> </tr> <tr> <td>On 36th day</td> <td>Color shows slightly partial cyan</td> </tr> <tr> <td>On 40th day</td> <td>Color shows further cyan</td> </tr> <tr> <td>On 48th day</td> <td>No obvious change since last time</td> </tr> <tr> <td>On 88th day</td> <td>No obvious change since last time</td> </tr> </tbody> </table>			Conclusion Description		First test	Color and appearance has no change	On 12 th day	Color shows a little slight yellowing	On 20 th day	Color shows a little further yellowing	On 28 th day	Color shows further yellowing	On 36 th day	Color shows slightly partial cyan	On 40 th day	Color shows further cyan	On 48 th day	No obvious change since last time	On 88 th day	No obvious change since last time
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<p>Test Summary</p>	<p>Through long time immersion, PVC of neon flex produced reaction with swimming water, showing slight yellowing and cyan, which maybe cause slight color shifting of product, and we're doing test of lighted product into swimming water to observe photo chromic stability.</p>																				