

# Ultraviolet Transmission Test Report

Using the LabSphere UV-1000F

Analyzed for: <i>Calyx Containers</i>	Work Order # <b>20424</b>
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## Sample Information

Sample Description:	Sample :		
Calyx UV Blocker container	1	Wall section cut from a sample	
Calyx UV Blocker container	2	Wall section cut from a sample	
Calyx CONTROL Container	3	Wall section cut from a sample	
Calyx CONTROL Container	4	Wall section cut from a sample	

Three samples of each type submitted for UV transmission testing. Two of each sample types had one wall cut from the container to allow the analyzer to scan the sample. No other preparatory processes were applied.

## Results

For each of the two (2) specimens analyzed for each type of samples – Calyx UV Blocker and the Calyx Control Samples, six (6) measurement scans were performed on each sample.

Mean Percent Transmission, by Wavelength Range			
	nm	Avg. Calyx UV Blocker	Avg. Calyx Control
UVC	250 - 290	4.11	20.69
UVB	290 - 320	1.23	60.88
UVA	320 - 400	4.64	64.13
UVA+B	290 - 400	3.72	63.23
VISIBLE	400-450	75.21	77.50
Table 1			

Mean Absorbance, by Wavelength Range			
	nm	Avg. Calyx UV Blocker	Avg. Calyx Control
UVC	250 - 290	1.43	0.75
UVB	290 - 320	1.96	0.22
UVA	320 - 400	1.85	0.19
UVA+B	290 - 400	1.88	0.20
VISIBLE	400-450	0.13	0.11
Table 2			

## Review of Results

The spectra for the two sets of samples were radically different; the shortwave transmission for the **Controls** were > 20%

And the **Calyx UV Blocker** samples averaged about 4%. In the UVA and UVB the Controls were over 60 and the “A” samples were less than 5. The Control absorbance values were less than 0.8 whereas the **Calyx UV Blocker** were over 1.4 in the shortwave, and the Controls were nearly 2 in the UV with the visible around 0.2.

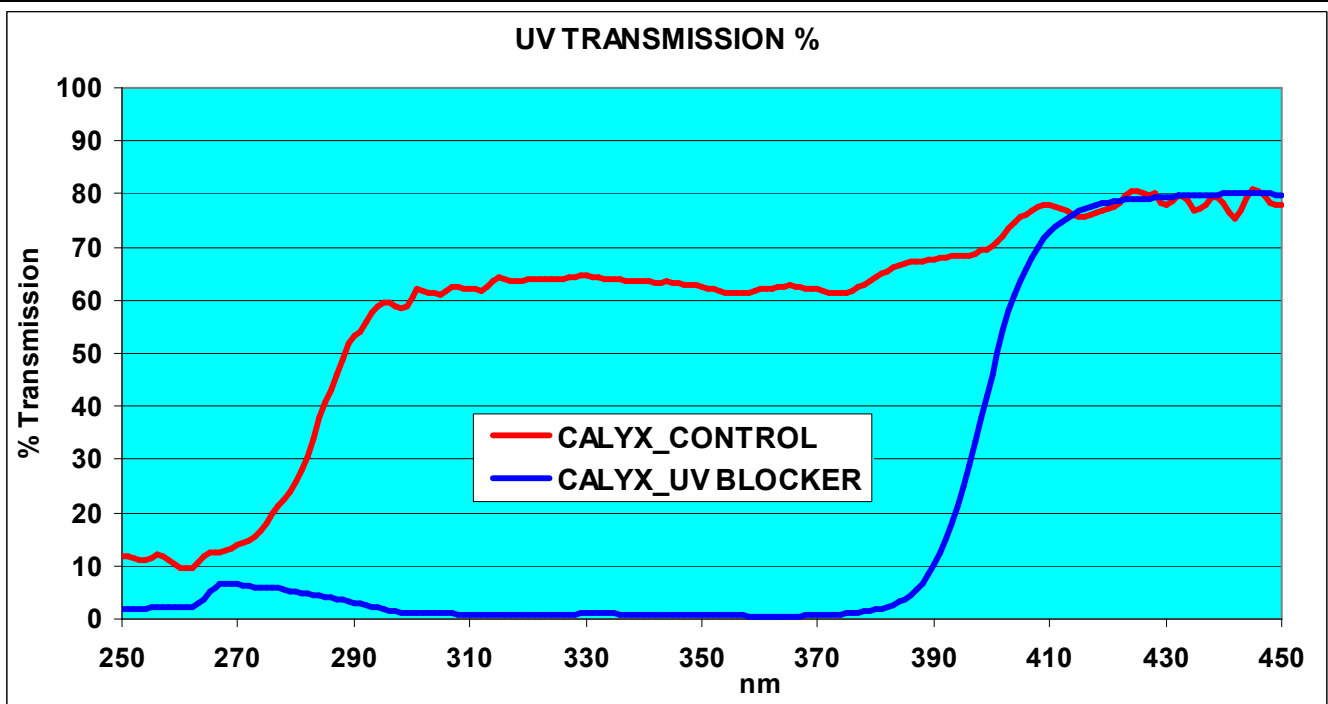


Figure 1

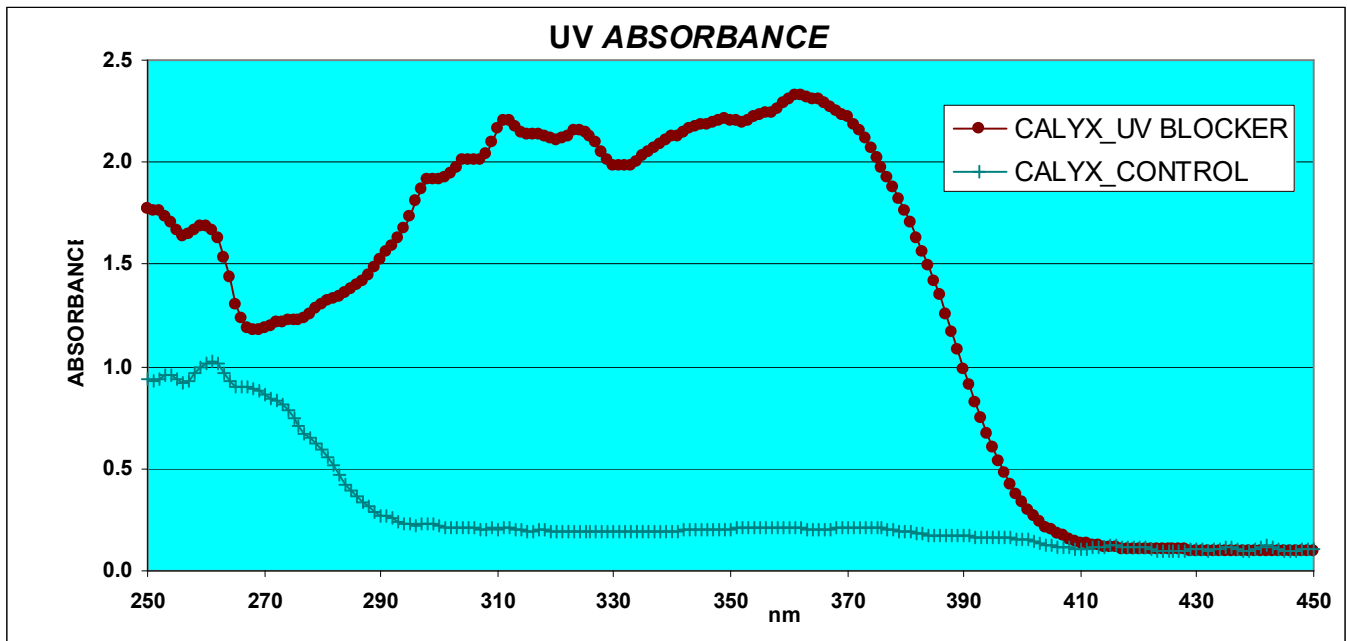


Figure 2