



CASE NARRATIVE

AN EVALUATION OF VOLATILE ORGANIC COMPOUND EMISSION LEVELS ASSOCIATED WITH INTEGRA BOOST 62% RH AND BOVEDA 62% RH 2 WAY HUMIDITY CONTROL HUMECTANTS

January 26, 2017

Bonner Analytical Testing Company was retained by Desiccare Inc. to evaluate off gassing characteristics of their product Integra Boost 62% RH and a competitors product BOVEDA 62% RH 2 Way Control Humectant. The experiments were conducted January 25, 2017.

Experimental:

One Boveda 62% RH sachet and one Integra Boost 62% RH sachet was removed from its clear packaging and placed in separate five liter foil faced gas sampling bag equipped with a septum sampling port. The bags were then sealed. A third Control bag was treated in a similar manner. Two hundred milliliters of outside air was introduced to each bag.

The bags were allowed to sit at room temperature for 6 hours prior to analysis.

The analytical procedure involved removing an aliquant of air (5.0cc) from each of the bags, and injecting the samples into a gas chromatograph equipped with an Ocean Instruments Eclipse purge and trap introductory system connected to an Agilent 6890 gas chromatograph with an Agilent 5973 mass selective detector.

The method quantitation limit (MQL) was estimated to be 1.0 ug/l.

Results:

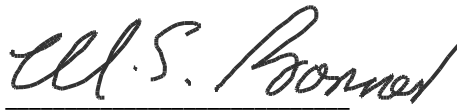
Sample ID	Analyte	Concentration (ug/L)	Duplicate
Control	Acetone	ND	ND
Integra Boost 62% RH	Acetone	ND	ND
Boveda 62% RH	Acetone	9.8	9.35

ND = Non-Detect

Conclusion:

Boveda 62% RH 2-Way Humidity Control Humectant produces a significant amount of Acetone as a byproduct compared to Integra Boost 62% RH; which was Non-Detect (<1.0ug/l). Additionally, the Boveda product continued to off gas giving a concentration of 13.11 ug/l at 18 hours.

Certified By:



Michael S. Bonner, Ph.D.