

July 17, 2017 Via Email: *chris@intcoatings.com*

Mr. Chris Collins International Coatings Group, Inc. 757 SE 17th Street, Suite 846 Ft. Lauderdale, FL 33316-2960

SUBJECT: Results of Volatile Organic Compound (VOC) Content Testing; <u>KTA-Tator, Inc. Project No. 370388-A1</u>

Dear Mr. Collins:

In accordance with KTA-Tator, Inc. (KTA) Proposal Number PN177927, the signed Authorization to Proceed May 27, 2017, and the subsequent email correspondence on June 23, 2017, KTA has completed additional VOC content testing on the submitted sample. This report contains descriptions of the testing procedures employed and the results of the testing.

SAMPLES

Two half-pint containers filled with liquid material labeled, "FBL-200" were received from International Coatings Group, Inc. on May 23, 2017. It should be noted that at no time did KTA personnel witness the acquisition of the samples.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

The Volatile Organic Compound (VOC) content of the submitted samples was determined in accordance with ASTM D3960-05(13), "Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings." The VOC content values are the result of calculations performed using the weight solids and density determinations in addition to a Karl Fischer Titration determination of the percent water in the coatings. When exempt solvents are present in a coating material, the calculation utilized to determine the VOC (g/L) content is expanded to account for those materials. In the case of this sample, exempt solvents were not indicated by the client. The results of the VOC content determination are provided in the table below, "Volatile Organic Compound (VOC) Content Results."

Density

The density of the submitted coating material was determined in accordance with ASTM D1475-13, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products," at 25°C. A calibrated cup was weighed empty and then weighed full of liquid coating. The air bubbles were eliminated from the coatings as much as feasible by gently tapping the cup. Calculations utilizing the weight of the coating material and a constant for the calibrated cup

115 Technology Drive Pittsburgh, PA 15275 were performed to determine the density. The range of the density results were 12.029 - 12.040 lb/gal. The reported result is the average of four individual results.

Weight Solids

The weight solids content of the submitted coating material was determined in accordance with ASTM D2369-10(15)e1, "Standard Test Method for Volatile Content of Coatings." Briefly, this method involves placing a known amount of paint into an aluminum dish, heating to remove volatile compounds and then reweighing the sample. The percent weight solids content was calculated by dividing the remaining sample weight by the initial sample weight and multiplying by 100. The reported result is the average of four individual results.

Water Content By Karl Fischer Titration

The submitted sample was analyzed for water content in accordance with ASTM D4017-02(15), "Standard Test Method for Water in Paints and Paint Materials by Karl Fischer Method." For this testing, the Karl Fischer Titrator was standardized with distilled water prior to the sample analysis. The reported result is the average of four individual results.

Sample	Determination	Method	Results	
KTA-1 (FBL-200)	Density	ASTM D1475-13	12.033 lb/gal	1442 g/L
	Weight Solids	ASTM D2369-10(15)e1	71.44%	
	Percent Water	ASTM D4017-02(15)el	28.45%	
	VOC Content Calculation	ASTM D3690-05(13)	0.02 lb/gal	3 g/L

Volatile Organic Compound (VOC) Content Results

If you have any questions concerning the testing or this report, please contact me by telephone at 412.788.1300 extension 182, or by email at kstanczyk@kta.com.

Sincerely,

KTA-TATOR, INC.

ally Stancypk

Kaley M. Stanczyk // Project Manager/Chemical Technician

KMS/RBL:pm JN370388-A1

(370388-A1 International Coatings.doc)

NOTICE: This report represents the opinion of KTA-TATOR, INC. This report is issued in conformance with generally accepted industry practices. While customary precautions were taken to verify the information gathered and presented is accurate, complete and technically correct, this report is based on the information, data, time, materials, and/or samples afforded. This report should not be reproduced except in full.