April 21, 2020
Email: *info@amchemmail.com*

Mr. Shomendra Mann
Amchem Products Pvt. Ltd.
A-79, Sector 58
NOIDA 201 307
India

SUBJECT: Results of Physical Testing of Drythane; KTA-Tator, Inc. Project No. 330380-1-R1

Dear Mr. Mann:

In accordance with KTA-Tator, Inc. (KTA) Proposal No. PN120637, subsequent signed Authorization to Proceed (ATP) dated April 12, 2013, and prepayment received on May 9, 2013, KTA has performed various physical tests on coated samples provided by Amchem Products Pvt. Ltd (Amchem) designated as Drythane coating. The results of the testing are contained in this report.

SAMPLES

The samples listed in Table 1; "Samples" were received from Amchem on May 1, 2013. It should be noted that at no time did KTA personnel witness the coating application or preparation of the samples.

Table 1 – Samples

KTA Sample ID	Sample Description
330380-T1D	Two steel panels measuring 4″ x 4″ with center hole coated with Drythane
330380-T2D	
330380-F1D	Two 22 gage panels coated one side with Drythane
330380-F2D	
330380-FF1D	Two free films measuring 8″ x 24″ coated with Drythane
330380-FF2D	
330380-IR2	One canister containing Drythane
330380-IR3	One canister containing Activator 9000

LABORATORY INVESTIGATION

The laboratory investigation consisted of performing various physical tests on a coating membrane, reportedly Drythane. The following tests were performed: water absorption, water vapor permeability, abrasion resistance, tensile strength and elongation, flexibility, hardness, and chemical resistance. In addition to the physical tests, infrared spectra of the liquid materials were obtained. The test descriptions and the results of the testing are provided below.

Water Absorption

The water absorption of the free film sample was measured in accordance with Procedure 7.4 (Long Term Immersion) of ASTM D 570-98, "Standard Test Method for Water Absorption of Plastics." Three bars measuring 3″ x 1″ were cut from the free film and the thickness of each bar was measured using Mitutoyo Digimatic Calipers. The samples were conditioned in an oven maintained at 50°F for 24 hours. After conditioning, the samples were returned to room temperature and weighed. The samples were then submerged in deionized water maintained at laboratory conditions (approximately 70°F). The samples were removed from the water following 24 hours, one week and every two weeks thereafter. The samples were wiped dry of any excess water, weighed, and immediately replaced in the water. A table containing detailed results as well as graphical interpretation of the data can be found in Appendix 1. The percent increase in weight is reported in Table 2, "Water Absorption Data." The percent increase in weight was determined using the following equation:

*Increase in weight (%) = (wet weight – conditioned weight)/conditioned weight*100*

Table 2 – Water Absorption Data

Replicate	Average Thickness (inches)	Increase in Weight (%)					
		24 hours	Week 1	Week 3	Week 5	Week 7	Week 9
WA1D	96.5	0.2150	0.4437	0.5641	0.5882	0.5813	0.5968
WA2D	101.2	0.2020	0.4332	0.5616	0.5924	0.5804	0.5890
WA3D	102.1	0.1997	0.4319	0.5536	0.5926	0.5715	0.5861

Water Vapor Permeability

Seven discs of the coating (one designated as the blank) were cut from the free film sample and tested for water vapor permeability using the inverted water method (Method BW) of ASTM E96-10, "Standard Test Methods for Water Vapor Transmission of Materials." The thickness of each disk was measured in four spots using Mitutoyo Digimatic Calipers. Each disc was sealed with wax to a 4″ diameter glass dish filled ¾ of the way with deionized water. The dishes were

then weighed, inverted and maintained at approximately 70°F and 50% relative humidity for a period of 30 days. The length of testing was dictated by the test method. The results of the testing are reported in Table 3, "Water Vapor Permeability Results." A table containing daily weights of the samples and other pertinent data can be found in Appendix 2.

Method ASTM E96-10 specifies that the calculation of permeability can be done only when the test specimen is not less than ½" thick. The test specimens were less than 1½" thick. The results for permeability were supplied as a courtesy.

Table 3 – Water Vapor Permeability Results

Sample ID	Average Thickness (mils)	WVT (g/day-m^2)	Average WVT (g/day-m^2)	Combined Average WVT (g/day-m^2)	WVP (metric perms)	Average WVP (metric perms)	Combined Average WVP (metric perms)	Permeability (perm inch)	Average Permeability (perm-inch)	Combined Average Permeability (perm-inch)
P2D	87.4	1.27	2.84	1.85	0.142	0.316	0.208	1.9×10^{-2}	4.5×10^{-2}	2.94×10^{-2}
P3D	100.9	4.11			0.457			7.0×10^{-2}		
P4D	86.9	3.12			0.347			4.6×10^{-2}		
P5D	88.3	1.31	0.85		0.154	0.100		2.1×10^{-2}	1.38×10^{-2}	
P7D	95.5	0.39			0.045			6.6×10^{-3}		

Abrasion Resistance

Taber abrasion resistance was determined in accordance with ASTM D4060-10, "Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser." Duplicate 4" x 4" panels coated on one side were weighed then subjected to 1000 cycles using a 1000g load and CS-17 abrasion wheels. Post weights were acquired for the samples, and the weight loss (in mg) reported. The results of the testing are contained in Table 4, "Taber Abrasion Resistance Results."

Table 4 – Taber Abrasion Resistance Results

Sample ID	Weight Loss (mg)	Average Weight Loss (mg)
330380-T1D	93	100
330380-T2D	106	

Tensile Strength and Elongation

Tensile strength and elongation were determined in accordance with ASTM D412-06, "Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers – Tension." The samples were maintained at ambient laboratory conditions (70 ± 2°F and 50 ± 5% RH) for a minimum of 24 hours before testing. Ten specimens were cut into a dumbbell shape from the free film using Die C. The specimens were pulled with a Tinius Olsen Universal Testing Machine at a rate of 2.0 inches per minute. The tensile strength was calculated using the force required to break the specimens along with the width and thickness of each. The percent elongation was calculated using the original gage length and the extension of the grips at sample rupture. The dimensions of the sample were measured using Mitutoyo Digimatic Calipers. The individual results of five replicates are reported along with the average in Table 5, "Tensile Strength and Elongation Results."

Table 5 – Tensile Strength and Elongation Results

Replicate	Cross-Sectional Area (in^2)	Force to Rupture (lbf)	Extension (in)	Tensile Strength (psi)	Average Tensile Strength (psi)	Percent Elongation (%)	Average Percent Elongation (%)
TS3D	0.0196	57	1.238	2908	2487	123.8	100.0
TS4D	0.0219	51	0.856	2329		85.6	
TS6D	0.0216	53	1.034	2454		103.4	
TS7D	0.0216	50	0.882	2315		88.2	
TS8D	0.0218	53	0.990	2431		99.0	

Flexibility

Flexibility testing was performed on Panels F1 and F2 in accordance with ASTM D522-93(08), "Standard Test Method for Mandrel Bend Test of Attached Organic Coatings," Method B. Coating thickness measurements were obtained on five spots on each sample using a DeFelsko PosiTector® 6000 non-destructive electronic coating thickness gage. The coating thickness averages ranged from 61.0 – 69.4 mils thick. The panels were bent 180° over a ½″ mandrel and a 1″ mandrel then examined visually for cracking. No cracking was evident on any of the replicates at either mandrel size.

Hardness

The hardness of the coating was evaluated in accordance with ASTM D2240-05(10), "Standard Test Method for Rubber Property – Durometer Hardness." Using a Shore D durometer, five readings were obtained from the free film sample. The sample had an average hardness of 64.2.

Chemical Resistance

Chemical resistance was assessed in accordance with AWWA C222-08, "Polyurethane Coatings for the Interior and Exterior of Steel Water and Pipe Fittings," which references ASTM D 543-06, "Standard Test Method for Resistance of Plastics to Chemical Reagents." The chemical solutions used for the testing included 10% sulfuric acid, 30% sodium chloride, 30% sodium hydroxide, and No. 2 diesel fuel. The average changes in mass and dimensions of three replicates were calculated after 30 days immersion at ambient temperature. The C222-08 standard specifies a requirement of "5% change in mass, length or width after 30 days immersion, maximum." The results of the testing are provided in Table 6, "Chemical Resistance Data." Detailed results of the testing are provided in Appendix 3.

Table 6 – Chemical Resistance Data

Chemical Reagent	Replicate	% Δ Width	% Δ Length	% Δ Weight
30% Sodium Chloride	CR1D	0.204	- 0.046	0.191
	CR2D	0.859	- 0.044	0.201
	CR3D	- 0.723	0.006	0.193
10% Sulfuric Acid	CR4D	0.429	- 0.034	0.349
	CR5D	0.033	- 0.117	0.350
	CR6D	0.339	- 0.006	0.092
30% Sodium Hydroxide	CR7D	0.049	- 0.775	0.648
	CR8D	- 0.235	- 0.755	-0.005
	CR9D	- 0.596	- 0.867	1.219
No. 2 Diesel Fuel	CR10D	2.143	3.361	10.800
	CR11D	3.246	3.449	10.045
	CR12D	3.253	3.881	11.636

Infrared Spectroscopy

Infrared spectroscopic analysis was performed using a Mattson Galaxy Model 3020 Fourier transform infrared spectrometer. This technique involved placing a small amount of material between two potassium bromide (KBr) salt plates. The salt plates were then placed in the optical path of the spectrometer and spectra were obtained over the range of 4000 to 400 cm^{-1}. The spectra obtained are provided in Appendix 4.

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.

Kaley Stanczyk

Kaley M. Stanczyk
Project Manager/Chemical Technician

Appendices:

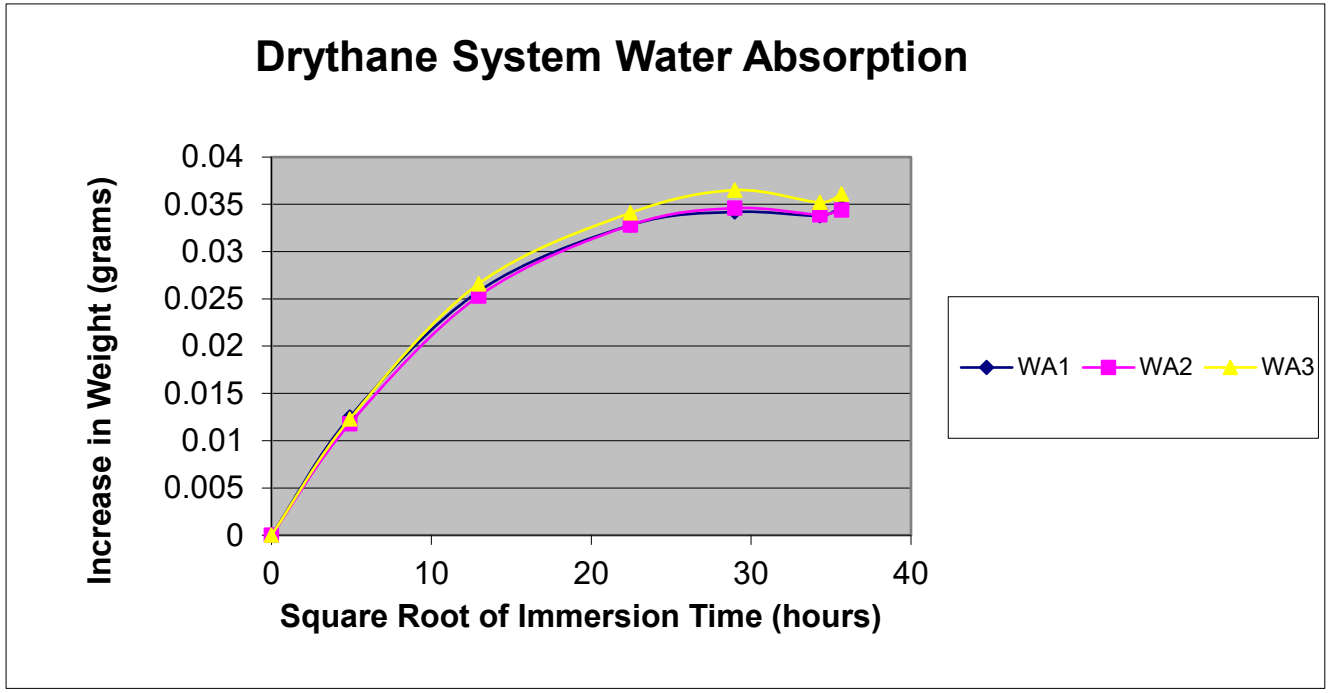
1 – Water Absorption Data
2 – Water Vapor Permeability Data
3 – Chemical Resistance Data
4 – Infrared Spectra

R1 – a revision is being issued to update the name of the coating material and the formatting style of the report.

KMS/RNR:edg

Appendix 1

330380 Amchem Drythane System				
Water Absorption (Long Term)				
	Conditioned Weights:	5.8141	5.8406	6.1592
Days	**√ [Immersion Time] (Hours ½)**	**Increase in Weight WA1D (g)**	**Increase in Weight WA2D (g)**	**Increase in Weight WA3D (g)**
0	0	0	0	0
1	4.898979486	0.0125	0.0118	0.0123
7	12.9614814	0.0258	0.0253	0.0266
21	22.44994432	0.0328	0.0328	0.0341
35	28.98275349	0.0342	0.0346	0.0365
49	34.2928564	0.0338	0.0339	0.0352
53	35.665109	0.0347	0.0344	0.0361



Appendix 2

Amchem 330380 Drythane-1											
ASTM E96/96M, Procedure BW-Inverted Water Method at 73.4°F and 50% Relative Humidity											
Drythane											
Date	Hours	Cup P2D (g)	Cup P2D (grain)	Cup P3D (g)	Cup P3D (grain)	Cup P4D (g)	Cup P4D (grain)	LANK (P8D) (g	LANK (P8D) (grain	Temperature (°F)	%Relative Humidity
7/2/13 2:55 PM	0.00	312.559	4822.79	323.055	4984.74	306.480	4728.99	135.480	2090.46	70.0	50.0
7/3/13 2:37 PM	23.70	312.494	4821.78	322.930	4982.81	306.434	4728.28	135.480	2090.46	70.2	54.7
7/5/13 3:12 PM	72.28	312.419	4820.63	322.719	4979.55	306.362	4727.17	135.480	2090.46	70.0	50.0
7/8/13 2:52 PM	143.95	312.341	4819.42	322.658	4978.61	306.292	4726.09	135.479	2090.44	70.2	56.4
7/9/13 3:21 PM	168.43	312.331	4819.27	322.647	4978.44	306.270	4725.75	135.479	2090.44	70.2	56.2
7/10/13 2:55 PM	192.00	312.320	4819.10	322.633	4978.23	306.246	4725.38	135.476	2090.39	70.2	51.8
7/11/13 3:26 PM	216.52	312.292	4818.67	322.620	4978.03	306.217	4724.93	135.476	2090.39	70.1	56.5
7/12/13 2:36 PM	239.68	312.274	4818.39	322.605	4977.80	306.187	4724.47	135.473	2090.35	70.3	53.8
7/15/13 2:46 PM	311.85	312.234	4817.77	322.451	4975.42	306.107	4723.23	135.471	2090.32	71.3	56.4
7/16/13 4:00 PM	337.08	312.229	4817.69	322.415	4974.86	306.090	4722.97	135.473	2090.35	69.5	55.2
7/17/13 2:42 PM	359.78	312.223	4817.60	322.344	4973.77	306.075	4722.74	135.474	2090.36	69.1	59.5
7/18/13 2:59 PM	384.07	312.217	4817.51	322.300	4973.09	306.063	4722.55	135.475	2090.38	68.1	55.9
7/19/13 3:31 PM	408.60	312.208	4817.37	322.165	4971.01	306.042	4722.23	135.477	2090.41	70.4	54.7
7/22/13 4:37 PM	481.70	312.178	4816.91	321.574	4961.89	305.930	4720.50	135.476	2090.39	71.7	55.8
7/23/13 3:23 PM	504.47	312.163	4816.68	321.418	4959.48			135.477	2090.41	71.8	55.2
7/24/13 2:50 PM	527.92	312.144	4816.38	321.301	4957.67			135.471	2090.32	72.0	49.0
7/25/13 3:52 PM	552.95	312.111	4815.87	321.231	4956.59			135.471	2090.32	71.9	44.8
7/26/13 2:57 PM	576.03	312.085	4815.47	321.178	4955.78			135.469	2090.29	69.2	46.6
7/29/13 3:19 PM	648.40	312.027	4814.58	321.117	4954.84			135.469	2090.29	72.1	45.4
7/30/13 2:46 PM	671.85	312.010	4814.31	321.091	4954.43			135.468	2090.27	69.2	48.6
7/31/13 3:27 PM	696.53	312.010	4814.31	321.069	4954.09			135.470	2090.30	71.4	51.5
8/1/13 4:24 PM	721.48	311.987	4813.96	320.978	4952.69			135.470	2090.30	69.8	49.3

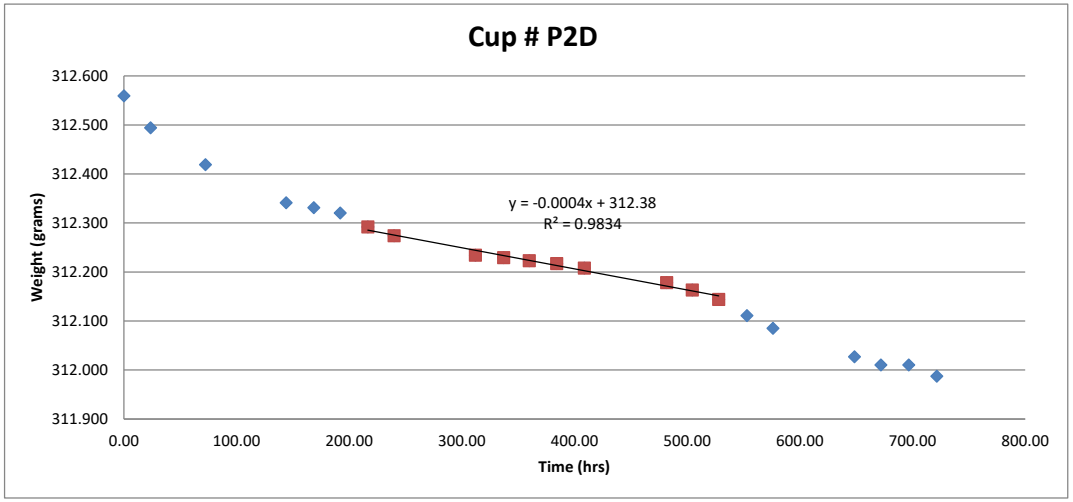
Method of coating application and curing procedure used	Prepared by client
Type of film support used	N/A
Design of cup	glass dish
Type or composition of sealant	wax blend (40% paraffin/60% microcrystalline wax)

Dish	P2D	P3D	P4D	BLANK (P8D)
Material Thickness (in)	0.0874	0.1009	0.0869	0.0925
Radius (in)	2.00	2.00	2.00	2.00

CALCULATIONS

Temperature (°F)	70.4	
Relative humidity in test chamber	52.6	%
Relative humidity in dish	100	%
Humidity change (as a decimal)	0.47	
Vapor Pressure	18.971	mm Hg
	0.747	in Hg

	P2D	P3D	P4D	BLANK (P8D)
Radius (m)	0.0508	0.0508	0.0508	0.0508
Area (m^2)	0.00811	0.00811	0.00811	0.00811
Slope (grams/hr)	4.31E-04	1.39E-03	1.06E-03	1.51E-05
Area (ft^2)	0.0873	0.0873	0.0873	0.0873
Slope (grains/hr)	0.00664	0.02144	0.01628	0.00023



WVT(g/h-m^2)	0.053	0.171	0.130	0.002
WVT(g/day-m^2)	1.27	4.11	3.12	0.04
WVP (g/hr-m^2-mm Hg)	5.9E-03	1.9E-02	1.4E-02	2.1E-04
WVP (metric perm)	0.142	0.457	0.347	0.005
WVP (g/Pa-s-m^2)	1.2E-08	4.0E-08	3.0E-08	4.3E-10
Permeability (g-cm/hr-m^2-mm Hg)	1.3E-03	4.9E-03	3.2E-03	4.9E-05
Permeability (g-cm/day-m^2-mm Hg)	3.1E-02	1.2E-01	7.7E-02	1.2E-03
Permeability (g/Pa-s-m)	2.7E-11	1.0E-10	6.7E-11	1.0E-12
WVT(grains/h-ft^2)	0.076	0.246	0.187	0.003
WVP (perm)	0.215	0.694	0.527	0.008
Permeability (perm inch)	1.9E-02	7.0E-02	4.6E-02	7.0E-04
Permeability (perm mil)	18.79	70.01	45.78	0.70

RESULTS

METRIC AVERAGES:

WVT(g/h-m^2)	0.118
WVT(g/day-m^2)	2.84
WVP (g/hr-m^2-mm Hg)	1.3E-02
WVP (metric perm)	0.316
WVP (g/Pa-s-m^2)	2.7E-08
Permeability (g-cm/hr-m^2-mm Hg)	3.1E-03
Permeability (g-cm/day-m^2-mm Hg)	7.5E-02
Permeability (g/Pa-s-m)	6.5E-11

ENGLISH AVERAGES:

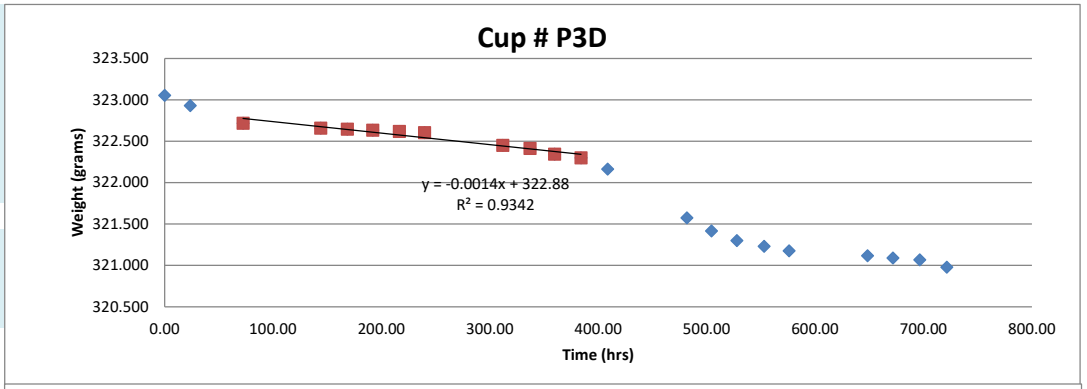
WVT(grains/h-ft^2)	0.169
WVP (perm)	0.479
Permeability (perm inch)	4.5E-02
Permeability (perm mil)	44.86

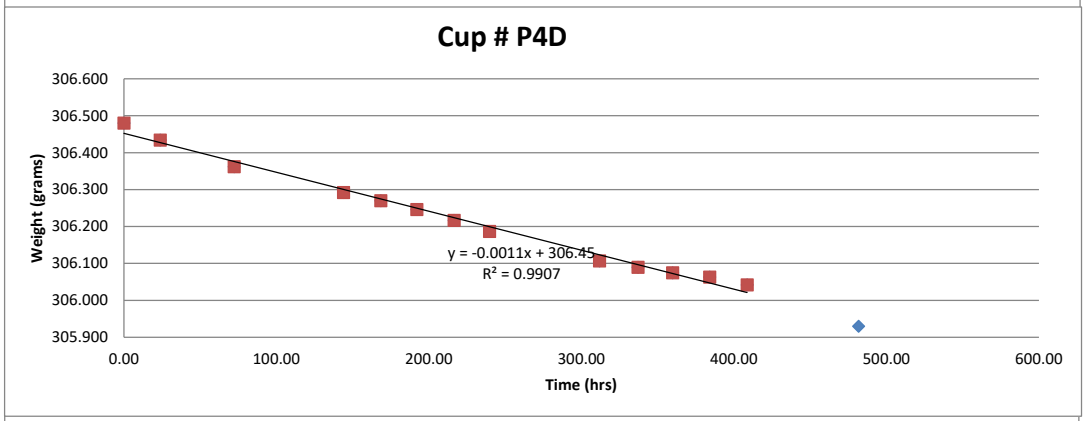
Method E96 specifies that the calculation of permeability can be done only when the test specimen is not less than 1/2 in. thick. The test specimens were less than 1/2 in. thick. The results for permeability were supplied as a courtesy.

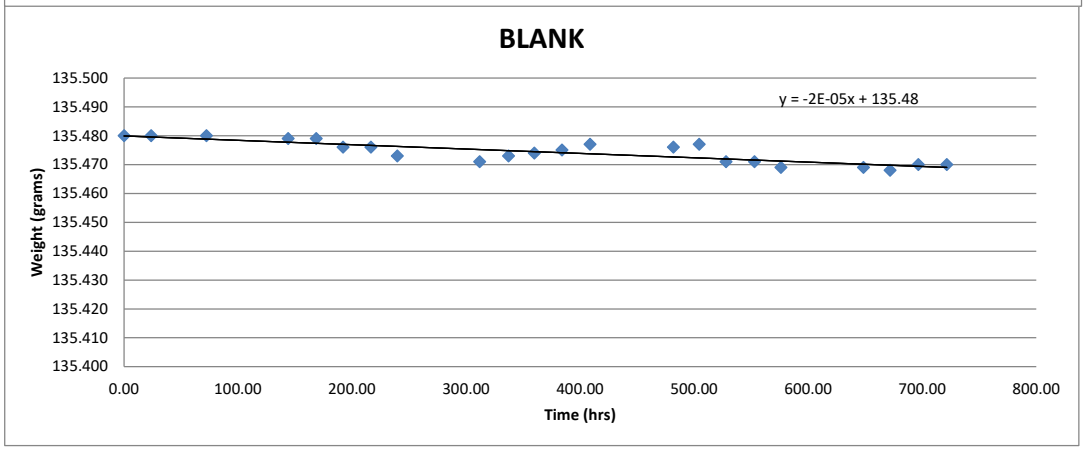
Analyst KMS date 9/1/2013

QC Review by CR date 9/11/2013

TL2392F1, R0, 9/27/2012







Amchem 330380 Drythane-2											
ASTM E96/96M, Procedure BW-Inverted Water Method at 73.4°F and 50% Relative Humidity											
		Drythane									
Date	Hours	Cup P5D (g)	Cup P5D (grain)	Cup P6D (g)	Cup P6D (grain)	Cup P7D (g)	Cup P7D (grain)	LANK (P8D) (g	LANK (P8D) (grain	Temperature (°F)	%Relative Humidity
7/2/13 2:55 PM	0.00	354.455	5469.24	315.545	4868.86	342.197	5280.10	135.480	2090.46	70.0	50.0
7/3/13 2:37 PM	23.70	354.413	5468.59	315.323	4865.43	342.164	5279.59	135.480	2090.46	70.2	54.7
7/5/13 3:12 PM	72.28	354.377	5468.04	314.791	4857.23	342.111	5278.77	135.480	2090.46	70.0	50.0
7/8/13 2:52 PM	143.95	354.329	5467.30	313.773	4841.52	342.102	5278.63	135.479	2090.44	70.2	56.4
7/9/13 3:21 PM	168.43	354.324	5467.22	313.448	4836.50	342.101	5278.62	135.479	2090.44	70.2	56.2
7/10/13 2:55 PM	192.00	354.321	5467.17	313.034	4830.11	342.099	5278.59	135.476	2090.39	70.2	51.8
7/11/13 3:26 PM	216.52	354.316	5467.10	312.701	4824.98	342.096	5278.54	135.476	2090.39	70.1	56.5
7/12/13 2:36 PM	239.68	354.306	5466.94	312.379	4820.01	342.091	5278.46	135.473	2090.35	70.3	53.8
7/15/13 2:46 PM	311.85	354.281	5466.56	311.306	4803.45	342.080	5278.29	135.471	2090.32	71.3	56.4
7/16/13 4:00 PM	337.08	354.288	5466.66	310.910	4797.34	342.078	5278.26	135.473	2090.35	69.5	55.2
7/17/13 2:42 PM	359.78	354.286	5466.63	310.523	4791.37	342.077	5278.25	135.474	2090.36	69.1	59.5
7/18/13 2:59 PM	384.07	354.273	5466.43	310.128	4785.28	342.078	5278.26	135.475	2090.38	68.1	55.9
7/19/13 3:21 PM	408.43	354.278	5466.51	309.699	4778.66	342.077	5278.25	135.477	2090.41	70.4	54.7
7/22/13 4:37 PM	481.70	354.268	5466.36	308.274	4756.67	342.075	5278.22	135.476	2090.39	71.7	55.8

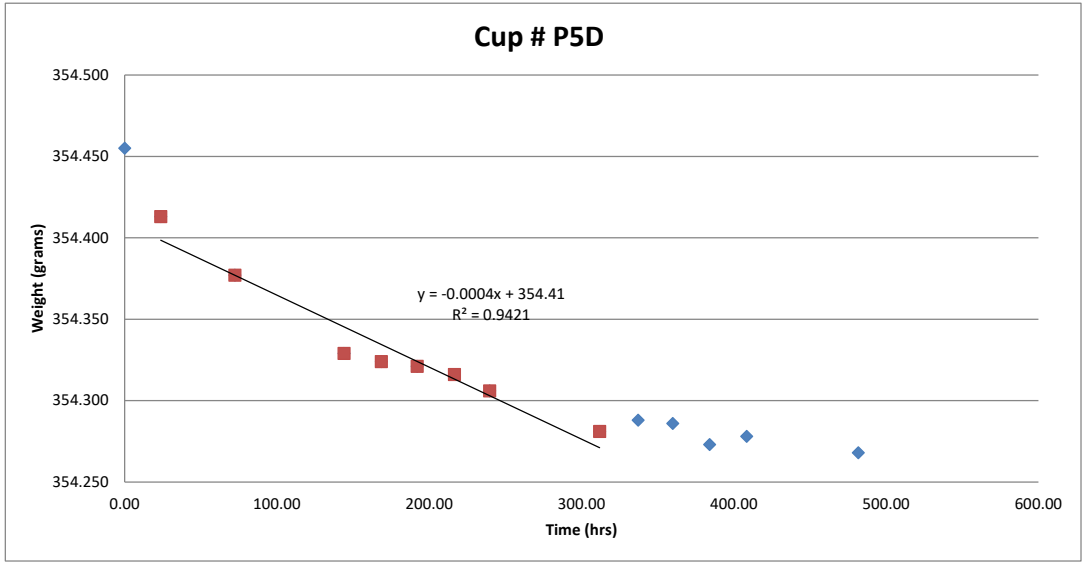
Method of coating application and curing procedure used	Prepared by client
Type of film support used	N/A
Design of cup	glass dish
Type or composition of sealant	wax blend (40% paraffin/60% microcrystalline wax)

Dish	P5D	P6D	P7D	BLANK (P8D)
Material Thickness (in)	0.0883	0.0853	0.0955	0.0925
Radius (in)	2.00	2.00	2.00	2.00

CALCULATIONS

Temperature (°F)	70.1	
Relative humidity in test chamber	54.8	%
Relative humidity in dish	100	%
Humidity change (as a decimal)	0.45	
Vapor Pressure	18.778	mm Hg
	0.739	in Hg

	P5D	P6D	P7D	BLANK (P8D)
Radius (m)	0.0508	0.0508	0.0508	0.0508
Area (m^2)	0.00811	0.00811	0.00811	0.00811
Slope (grams/hr)	4.42E-04	1.41E-02	1.30E-04	1.35E-05
Area (ft^2)	0.0873	0.0873	0.0873	0.0873
Slope (grains/hr)	0.00682	0.21775	0.00201	0.00021
WVT(g/h-m^2)	0.055	1.741	0.016	0.002
WVT(g/day-m^2)	1.31	41.78	0.39	0.04
WVP (g/hr-m^2-mm Hg)	6.4E-03	2.0E-01	1.9E-03	2.0E-04
WVP (metric perm)	0.154	4.920	0.045	0.005
WVP (g/Pa-s-m^2)	1.3E-08	4.3E-07	3.9E-09	4.1E-10
Permeability (g-cm/hr-m^2-mm Hg)	1.4E-03	4.4E-02	4.6E-04	4.6E-05
Permeability (g-cm/day-m^2-mm Hg)	3.5E-02	1.1E+00	1.1E-02	1.1E-03
Permeability (g/Pa-s-m)	3.0E-11	9.2E-10	9.6E-12	9.6E-13



WVT(grains/h-ft^2)	0.078	2.495	0.023	0.002
WVP (perm)	0.234	7.464	0.069	0.007
Permeability (perm inch)	2.1E-02	6.4E-01	6.6E-03	6.6E-04
Permeability (perm mil)	20.64	636.27	6.59	0.66

RESULTS

METRIC AVERAGES:

WVT(g/h-m^2)	0.604
WVT(g/day-m^2)	14.49
WVP (g/hr-m^2-mm Hg)	7.1E-02
WVP (metric perm)	1.706
WVP (g/Pa-s-m^2)	1.5E-07
Permeability (g-cm/hr-m^2-mm Hg)	1.5E-02
Permeability (g-cm/day-m^2-mm Hg)	3.7E-01
Permeability (g/Pa-s-m)	3.2E-10

ENGLISH AVERAGES:

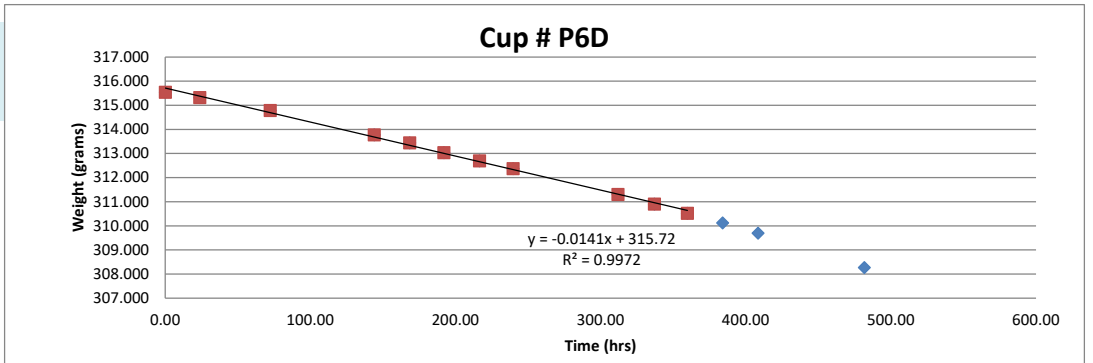
WVT(grains/h-ft^2)	0.865
WVP (perm)	2.589
Permeability (perm inch)	2.2E-01
Permeability (perm mil)	221.17

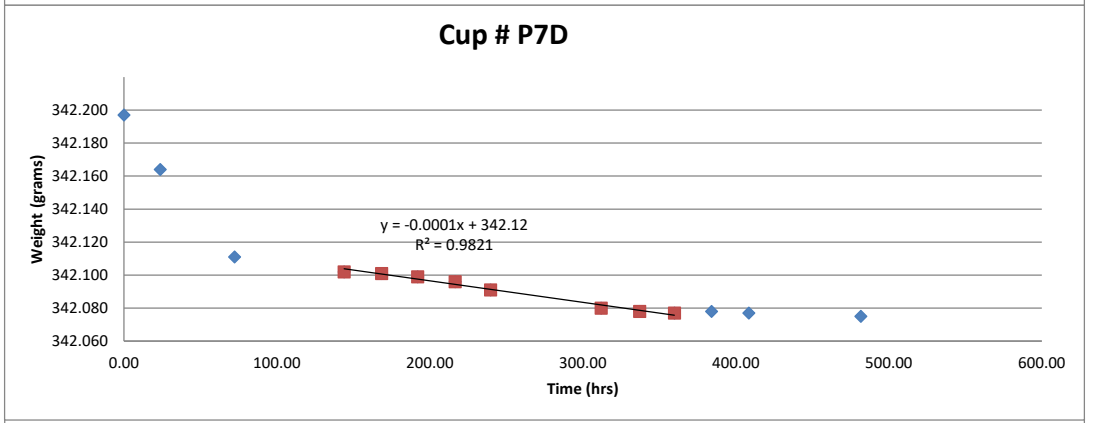
Method E96 specifies that the calculation of permeability can be done only when the test specimen is not less than 1/2 in. thick. The test specimens were less than 1/2 in. thick. The results for permeability were supplied as a courtesy.

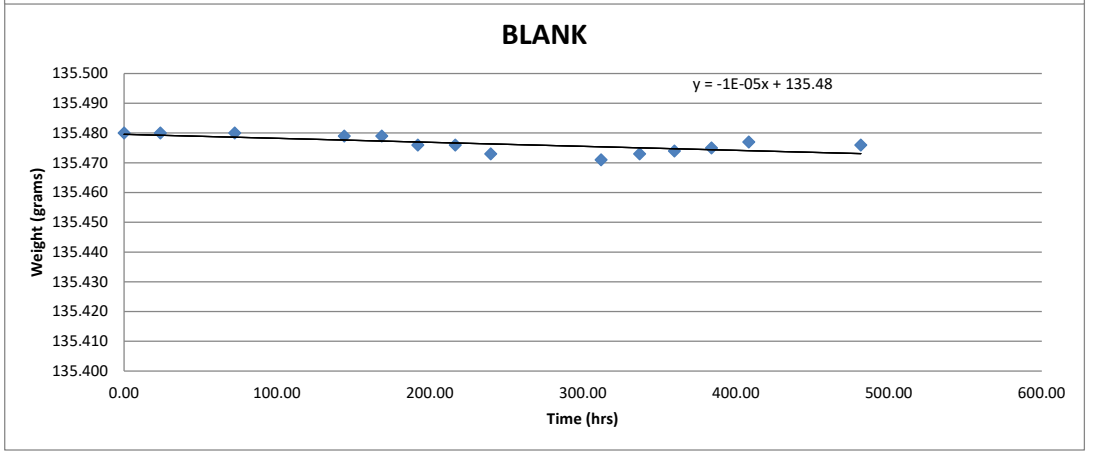
Analyst KMS date 9/1/2013

QC Review by CR date 9/11/2013

TL2392F1, R0, 9/27/2012



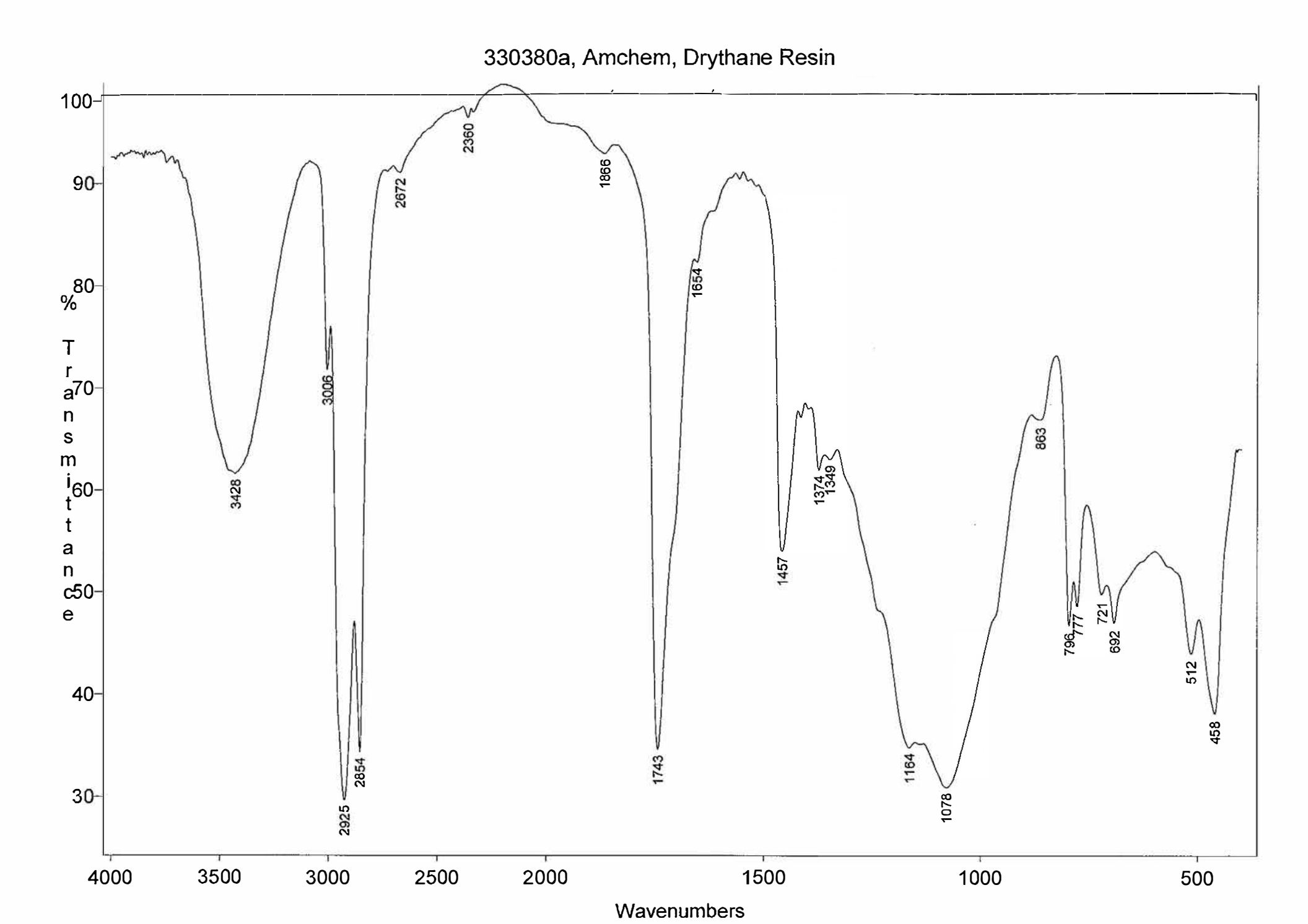


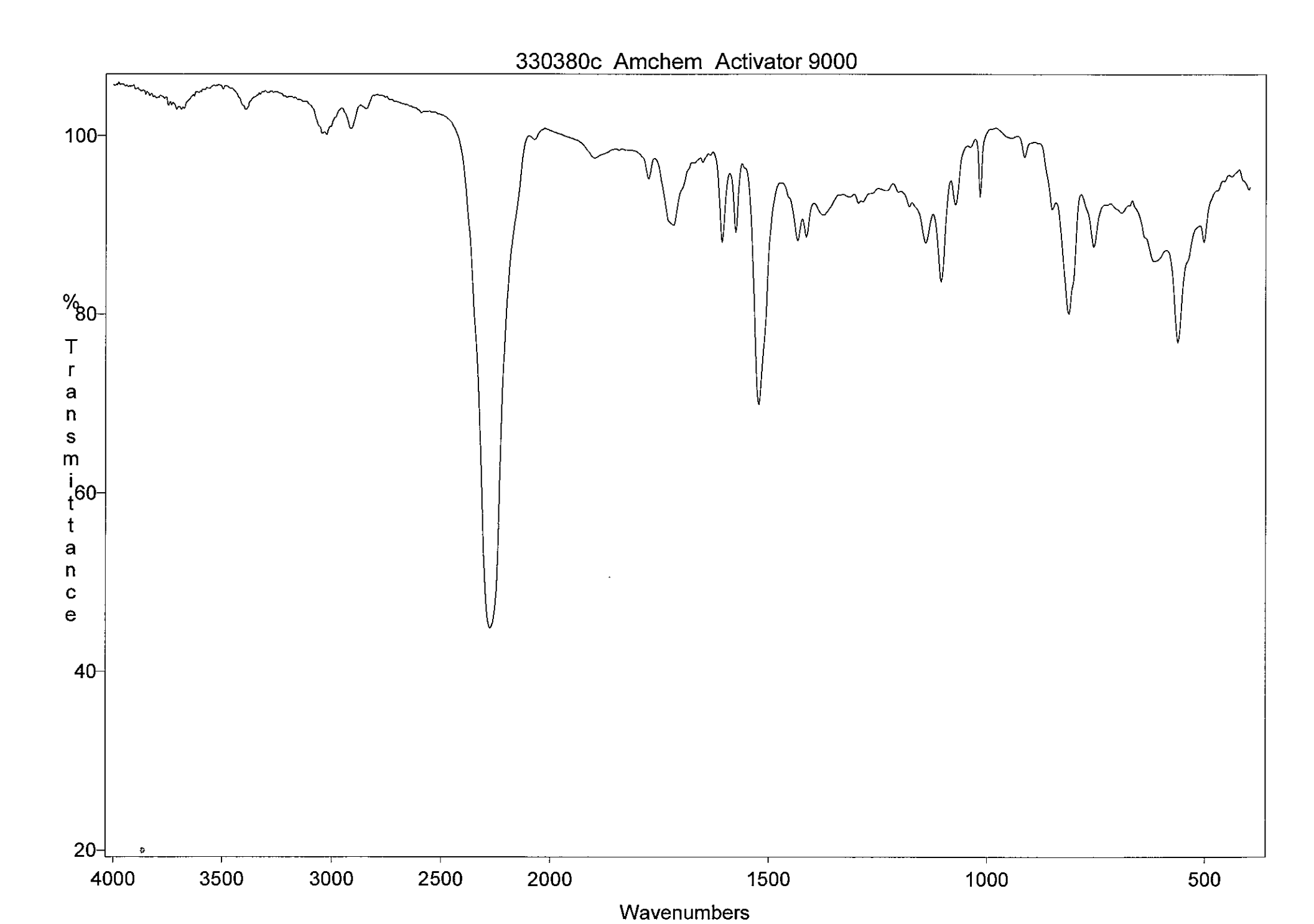


Appendix 3

Sample	Test Solution	Initial Weight	Final Weight	Δ Weight	Initial Thickness	Final Thickness	Δ Thickness	Initial Width	Final Width	Δ Width	Initial Length	Final Length	Δ Length	% Δ Weight	%Δ Thickness	%Δ Width	% Δ Length
CR1D	30% NaCl	14.967	14.995	0.029	0.103	0.101	-0.002	1.423	1.426	0.003	4.996	4.994	-0.002	0.191	-1.846	0.204	-0.046
CR2D		14.744	14.774	0.030	0.099	0.101	0.002	1.468	1.480	0.013	5.036	5.034	-0.002	0.201	1.715	0.859	-0.044
CR3D		14.600	14.628	0.028	0.101	0.101	0.000	1.438	1.428	-0.010	4.964	4.965	0.000	0.193	0.000	-0.723	0.006
CR4D	10% H_2SO_4	13.684	13.732	0.048	0.093	0.094	0.001	1.493	1.499	0.006	4.970	4.968	-0.002	0.349	0.971	0.429	-0.034
CR5D		15.137	15.190	0.053	0.100	0.101	0.000	1.495	1.496	0.000	4.966	4.960	-0.006	0.350	0.199	0.033	-0.117
CR6D		15.402	15.416	0.014	0.102	0.101	-0.001	1.476	1.481	0.005	4.995	4.995	0.000	0.092	-0.686	0.339	-0.006
CR7D	30% NaOH	15.572	15.673	0.101	0.106	0.105	-0.001	1.436	1.436	0.001	5.018	4.980	-0.039	0.648	-1.130	0.049	-0.775
CR8D		15.622	15.621	-0.001	0.106	0.106	0.000	1.444	1.441	-0.003	4.995	4.957	-0.038	-0.005	0.379	-0.235	-0.755
CR9D		15.353	15.541	0.187	0.102	0.100	-0.002	1.494	1.485	-0.009	4.988	4.945	-0.043	1.219	-2.344	-0.596	-0.867
CR10D	No. 2 Diesel Fuel	14.689	16.275	1.586	0.100	0.100	0.000	1.456	1.487	0.031	4.969	5.136	0.167	10.800	-0.300	2.143	3.361
CR11D		15.444	16.996	1.551	0.102	0.106	0.004	1.485	1.533	0.048	4.964	5.136	0.171	10.045	3.718	3.246	3.449
CR12D		14.367	16.038	1.672	0.096	0.101	0.005	1.491	1.540	0.049	4.963	5.156	0.193	11.636	5.208	3.253	3.881

Appendix 4


330380a, Amchem, Drythane Resin
100
90
80
70
60
50
40
30
% Transmittance
3428
3006
2925
2854
2672
2360
1866
1743
1654
1457
1374
1349
1164
1078
863
796
777
721
692
512
458
4000
3500
3000
2500
2000
1500
1000
500
Wavenumbers
Operator: KMS
Resolution: 4.0
Scans: 32
Date: Fri Jun 21 14:01:14:31 2013



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Scans: 32
Date: Thu Aug 29 09:10:45:81 2013