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ESTABLISHMENT OF QUALITY CONTROL LIMIT

Panel Producer : **PT SUMBER MAS INDAH PLYWOOD**
Composite Wood Product : **Hardwood Plywood Veneer Core 3 ply & 5 ply up**
Product Type : **HWPW – VC Urea Formaldehyde 0.05 ppm**

Sample No.	Quality Control test result ASTM D 5582 : 2000 (µg/mL) Y-axis	Compliance Test ASTM D 6007 : 2014 (ppm) X-axis
1.	0.105	0.010
2.	0.163	0.020
3.	0.173	0.030
4.	0.188	0.030
5.	0.207	0.030
QCL Equation: **Y (ASTM D 5582:2000) = 4.012 x (ASTM D 6007:2014) + 0.0709** **ASTM D 6007:2014** = $\frac{\mathbf{Y\ (ASTM\ D\ 5582:2000) - 0.0709}}{\mathbf{4.012}}$		
Applicable emission standard for HWPW = 0.05 ppm		
QCL (ASTM D 5582:2000) = **0.271 µg/mL**		

Jakarta, November 28th, 2017

EPA – Recognized TPC-6
MUTU CERTIFICATION Approval,

Didik Heru Untoro
Executive Director

PT. MUTUAGUNG LESTARI

Head Office & Laboratory :
Jl. Raya Bogor KM 33.5 No.19 Cimanggis - Depok 16953 Indonesia
Phone : (62-21) 8740202, Fax. : (62-21) 87740745 - 46
E-mail : webmaster@mutucertification.com Website : www.mutucertification.com

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ESTABLISHMENT OF CORRELATION

Panel Producer : **PT SUMBER MAS INDAH PLYWOOD**
Composite Wood Product : **Hardwood Plywood Veneer Core 3 ply & 5 ply up**
Product Type : **HWPW – VC Urea Formaldehyde 0.05 ppm**

Correlation Test Result for Urea Glue Type			
Sample No.	Quality Control test result ASTM D 5582 : 2000 (µg/mL)	Compliance Test ASTM D 6007 : 2014 (ppm)	Correlated to Small Chamber Value (ppm)
1	0.105	0.010	0.492
2	0.163	0.020	0.726
3	0.173	0.030	0.765
4	0.188	0.030	0.824
5	0.207	0.030	0.901
Quality Control test Method : Desiccators Method (ASTM D 5582 : 2000)			
Linier Regression Equation : **Y (ASTM D 5582:2000) = 4.012 x (ASTM D 6007:2014) + 0.0709** **ASTM D 6007:2014** = $\frac{\mathbf{Y\ (ASTM\ D\ 5582:2000) - 0.0709}}{\mathbf{4.012}}$			
Correlation Value: **0.931**			
Correlation Value Standard: **0.878**			

Jakarta, November 28th, 2017

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SECONDARY METHOD COMPLIANCE TEST

Panel Producer : **PT SUMBER MAS INDAH PLYWOOD**

Composite Wood Product : **Hardwood Plywood (Veneer Core)**

Product Type : **Urea Formaldehyde Resin 0.05 ppm**

Qualifying Test Results 3 Ply	
Test Method	ASTM D 6007 - 14
Compliance Test Result (ppm)	0.03

Panel Producer : **PT SUMBER MAS INDAH PLYWOOD**

Composite Wood Product : **Hardwood Plywood (Veneer Core)**

Product Type : **Urea Formaldehyde Resin 0.05 ppm**

Qualifying Test Results 5 Ply	
Test Method	ASTM D 6007 - 14
Compliance Test Result (ppm)	0.01

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ESTABLISHMENT OF QUALITY CONTROL LIMIT

Panel Producer : **PT SUMBER MAS INDAH PLYWOOD**
Composite Wood Product : **Hardwood Plywood Veneer Core 3 ply & 5 ply up**
Product Type : **HWPW – VC Phenol Formaldehyde 0.05 ppm**

Sample No.	Quality Control test result ASTM D 5582 : 2000 (µg/mL) Y-axis	Compliance Test ASTM D 6007 : 2014 (ppm) X-axis
1.	0.144	0.020
2.	0.159	0.020
3.	0.163	0.020
4.	0.173	0.020
5.	0.212	0.030
QCL Equation: **Y (ASTM D 5582:2000) = 5.20 x (ASTM D 6007:2014) + 0.0558** **ASTM D 6007:2014 =** $\frac{\mathbf{Y\ (ASTM\ D\ 5582:2000) - 0.0558}}{\mathbf{5.20}}$		
Applicable emission standard for HWPW = 0.05 ppm		
QCL (ASTM D 5582:2000) = **0.315 (µg/mL)**		

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ESTABLISHMENT OF CORRELATION

Panel Producer : **PT SUMBER MAS INDAH PLYWOOD**
Composite Wood Product : **Hardwood Plywood Veneer Core 3 ply & 5 ply up**
Product Type : **HWPW – VC Phenol Formaldehyde 0.05 ppm**

Correlation Test Result for Phenol Glue Type			
Sample No.	Quality Control test result ASTM D 5582 : 2000 (µg/mL)	Compliance Test ASTM D 6007 : 2014 (ppm)	Correlated to Small Chamber Value (ppm)
1	0.144	0.020	0.017
2	0.159	0.020	0.020
3	0.163	0.020	0.021
4	0.173	0.020	0.023
5	0.212	0.030	0.030
Quality Control test Method : Desiccators Method (ASTM D 5582 : 2000)			
Linier Regression Equation : **Y (ASTM D 5582:2000) = 5.20 x (ASTM D 6007:2014) + 0.0558** **ASTM D 6007:2014 =** $\frac{\mathbf{Y\ (ASTM\ D\ 5582:2000) - 0.0558}}{\mathbf{5.20}}$			
Correlation Value: **0.911**			
Correlation Value Standard: **0.878**			

Jakarta, November 28th, 2017

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SECONDARY METHOD COMPLIANCE TEST

Panel Producer : **PT SUMBER MAS INDAH PLYWOOD**

Composite Wood Product : **Hardwood Plywood (Veneer Core)**

Product Type : **Phenol Formaldehyde Resin 0.05 ppm**

Qualifying Test Results 3 Ply	
Test Method	ASTM D 6007 - 14
Compliance Test Result (ppm)	0.02

Panel Producer : **PT SUMBER MAS INDAH PLYWOOD**

Composite Wood Product : **Hardwood Plywood (Veneer Core)**

Product Type : **Phenol Formaldehyde Resin 0.05 ppm**

Qualifying Test Results 5 Ply	
Test Method	ASTM D 6007 - 14
Compliance Test Result (ppm)	0.02

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ESTABLISHMENT OF QUALITY CONTROL LIMIT

Panel Producer : **PT SUMBER MAS INDAH PLYWOOD**
Composite Wood Product : **Hardwood Plywood Veneer Core 3 ply & 5 ply up**
Product Type : **HWPW – VC Melamine Formaldehyde 0.05 ppm**

Sample No.	Quality Control test result ASTM D 5582 : 2000 (µg/mL) Y-axis	Compliance Test ASTM D 6007 : 2014 (ppm) X-axis
1.	0.179	0.020
2.	0.184	0.020
3.	0.199	0.020
4.	0.188	0.020
5.	0.224	0.030
QCL Equation: **Y (ASTM D 5582:2000) = 3.665 x (ASTM D 6007:2014) + 0.1143** **ASTM D 6007:2014 =** $\frac{\mathbf{Y\ (ASTM\ D\ 5582:2000) - 0.1143}}{\mathbf{3.665}}$		
Applicable emission standard for HWPW = 0.05 ppm		
QCL (ASTM D 5582:2000) = **0.297 (µg/mL)**		

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ESTABLISHMENT OF CORRELATION

Panel Producer : **PT SUMBER MAS INDAH PLYWOOD**
Composite Wood Product : **Hardwood Plywood Veneer Core 3 ply & 5 ply up**
Product Type : **HWPW – VC Melamine Formaldehyde 0.05 ppm**

Correlation Test Result for Melamine Glue Type			
Sample No.	Quality Control test result ASTM D 5582 : 2000 (µg/mL)	Compliance Test ASTM D 6007 : 2014 (ppm)	Correlated to Small Chamber Value (ppm)
1	0.179	0.020	0.018
2	0.184	0.020	0.019
3	0.199	0.020	0.023
4	0.188	0.020	0.020
5	0.224	0.030	0.030
Quality Control test Method : Desiccators Method (ASTM D 5582 : 2000)			
Linier Regression Equation : **Y (ASTM D 5582:2000) = 3.665 x (ASTM D 6007:2014) + 0.1143** **ASTM D 6007:2014 =** $\frac{\mathbf{Y\ (ASTM\ D\ 5582:2000) - 0.1143}}{3.665}$			
Correlation Value: **0.911**			
Correlation Value Standard: **0.878**			

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SECONDARY METHOD COMPLIANCE TEST

Panel Producer : **PT SUMBER MAS INDAH PLYWOOD**

Composite Wood Product : **Hardwood Plywood (Veneer Core)**

Product Type : **Melamine Formaldehyde Resin 0.05 ppm**

Qualifying Test Results 3 Ply	
Test Method	ASTM D 6007 - 14
Compliance Test Result (ppm)	0.02

Panel Producer : **PT SUMBER MAS INDAH PLYWOOD**

Composite Wood Product : **Hardwood Plywood (Veneer Core)**

Product Type : **Melamine Formaldehyde Resin 0.05 ppm**

Qualifying Test Results 5 Ply	
Test Method	ASTM D 6007 - 14
Compliance Test Result (ppm)	0.02

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