



Ref No. : 0303/12103

## CERTIFICATE OF TESTING LABORATORY ACCREDITATION

This is to certify that

*Paper Laboratory Double A (1991) Public Company Limited  
1 Moo 2, Tambon Thatoom, Amphoe Srimahaphote,  
Changwat Prachinburi 25140*

has successfully undergone assessment according to ISO/IEC 17025 : 2017  
and under the Bureau of Laboratory Accreditation, Department of Science Service  
for the requirements, regulations and criteria for the competence of testing laboratories

LABORATORY ACCREDITATION  
Accreditation Number TESTING - 0022  
BLA-DSS

The scope of accreditation is as annexed hereto

Issue date : 21<sup>st</sup> July 2023

Expired date : 20<sup>th</sup> July 2027

Signature : *Chantarat Vorasapan T*

(Mrs. Chantarat Vorasapavit)

Scientist, Senior Professional Level

Acting Director of Bureau of Laboratory Accreditation

Bureau of Laboratory Accreditation, Department of Science Service,  
Ministry of Higher Education, Science, Research and Innovation

## Scope of Laboratory Accreditation

Laboratory Name : Paper Laboratory Double A (1991) Public Company Limited

Address : 1 Moo 2, Tambon Thatoom, Amphoe Srimahaphote,  
Changwat Prachinburi 25140

Accreditation Number : Testing - 0022

Laboratory Status :  Permanent  Site  Temporary  Mobile

Item Number	Test Material / Product	Test Item / Range of Testing	Test Method / Technique Used
1	Uncoated printing paper	<ul style="list-style-type: none"> <li>- Basis weight 60 g/m<sup>2</sup> to 120 g/m<sup>2</sup></li> <li>- Basis weight 60 g/m<sup>2</sup> to 120 g/m<sup>2</sup></li> <li>- CIE whiteness 130 to 165</li> <li>- ISO Brightness 90 % to 100 %</li> <li>- D65 Brightness 100 % to 110 %</li> <li>- Opacity 80 % to 100 %</li> <li>- Moisture 3 % to 6 %</li> </ul>	<ul style="list-style-type: none"> <li>In - house method : WI-PM-640/7 (Manual) based on ISO 536 : 2019</li> <li>In - house method : WI-PM-640/1 (Autoline) based on ISO 536 : 2019</li> <li>ISO 11475 : 2017</li> <li>ISO 2470-1 : 2016</li> <li>ISO 2470-2 : 2008</li> <li>ISO 2471 : 2008</li> <li>ISO 287 : 2017</li> </ul>

Initial Issue Date 20<sup>th</sup> December 2007

Issue Number 6

Bureau of Laboratory Accreditation, Department of Science Service, Ministry of Higher Education, Science, Research and Innovation

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Item Number	Test Material / Product	Test Item / Range of Testing	Test Method / Technique Used
1 (cont.)	Uncoated printing paper	- Thickness 70 $\mu\text{m}$ to 160 $\mu\text{m}$  - Density 700 $\text{kg/m}^3$ to 800 $\text{kg/m}^3$  - Roughness 60 ml/min to 190 ml/min  - Water absorptiveness cobb method (at 60 seconds) 20 $\text{g/m}^2$ to 40 $\text{g/m}^2$  - Bending resistance 30 mN to 310 mN  - Tensile strength 2 kN/m to 10 kN/m  - Tensile strength 2 kN/m to 7 kN/m	In - house method : WI-PM-640/1 (Autoline) based on ISO 534 : 2011  In - house method : WI-PM-640/8 (Autoline) base on ISO 534 : 2011  In - house method : WI-PM-640/1 (Autoline) base on ISO 8791-2 : 2013  In - house method : WI-PM-640/4 (Manual) based on ISO 535 : 2014  In - house method : WI-PM-640/5 (Manual) base on ISO 2493-1 : 2010  In - house method : WI-PM-640/6 (Manual) based on ISO 1924-3 : 2005  In - house method : WI-PM-640/1 (Autoline) based on ISO 1924-3 : 2005

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Item Number	Test Material / Product	Test Item / Range of Testing	Test Method / Technique Used
1 (cont.)	Uncoated printing paper	- Tearing resistance 270 mN to 950 mN	In - house method : WI-PM-640/1 (Autoline) based on ISO 1974 : 2012
		- Air permeance 550 ml/min to 1 230 ml/min	In - house method : WI-PM-640/1 (Autoline) based on ISO 5636-3 : 2013
2	Xerographic paper	- Basis weight 60 g/m <sup>2</sup> to 120 g/m <sup>2</sup>	In - house method : WI-PM-640/7 (Manual) based on ISO 536 : 2019
		- Basis weight 60 g/m <sup>2</sup> to 120 g/m <sup>2</sup>	In - house method : WI-PM-640/1 (Autoline) based on ISO 536 : 2019
		- CIE whiteness 130 to 165	ISO 11475 : 2017
		- ISO Brightness 90 % to 100 %	ISO 2470-1 : 2016
		- D65 Brightness 100 % to 110 %	ISO 2470-2 : 2008

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Item Number	Test Material / Product	Test Item / Range of Testing	Test Method / Technique Used
2 (cont.)	Xerographic paper	- Opacity 80 % to 100 %	ISO 2471 : 2008
		- Moisture 3 % to 6 %	ISO 287 : 2017
		- Thickness 70 $\mu\text{m}$ to 160 $\mu\text{m}$	In - house method : WI-PM-640/1 (Autoline) based on ISO 534 : 2011
		- Density 700 $\text{kg}/\text{m}^3$ to 800 $\text{kg}/\text{m}^3$	In - house method : WI-PM-640/8 (Autoline) based on ISO 534 : 2011
		- Roughness 60 $\text{ml}/\text{min}$ to 190 $\text{ml}/\text{min}$	In - house method : WI-PM-640/1 (Autoline) base on ISO 8791-2 : 2013
		- Water absorptiveness cobb method (at 60 seconds) 20 $\text{g}/\text{m}^2$ to 40 $\text{g}/\text{m}^2$	In - house method : WI-PM-640/4 (Manual) based on ISO 535 : 2014

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Issue Date : 21<sup>st</sup> July 2023

Signature : 

(Mrs. Chantarat Vorasapavit)

Scientist, Senior Professional Level

Acting Director of Bureau of Laboratory Accreditation

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