

## SUPPLEMENT 1

Table 1: Group and sample codes generated according to the use of sizing, ink, and adhesive material.

	0	1	2	3
Sizing	No sizing	Egg W- white-alum	Rice-gum arabic	
Ink	No ink	Iron gall	Carbon Black	
Material	No material	7% HL	10 %HL	10% Starch

  

Sample codes	Sizing			Ink			Material				Group	
	0	1	2	0	1	2	0	1	2	3		
0.0.0 (blank)	Orange			Blue			Green					0.0
0.0.1	Orange			Blue				Green				0.0
0.0.2	Orange			Blue					Green			0.0
0.0.3	Orange			Blue						Green		0.0
0.1.0	Orange				Blue			Green				0.1
0.1.1	Orange				Blue				Green			0.1
0.1.2	Orange				Blue					Green		0.1
0.1.3	Orange				Blue						Green	0.1
0.2.0	Orange					Blue		Green				0.2
0.2.1	Orange					Blue			Green			0.2
0.2.2	Orange					Blue				Green		0.2
0.2.3	Orange					Blue					Green	0.2
1.0.0		Orange		Blue				Green				1.0
1.0.1		Orange		Blue					Green			1.0
1.0.2		Orange		Blue						Green		1.0
1.0.3		Orange		Blue							Green	1.0
1.1.0		Orange			Blue			Green				1.1
1.1.1		Orange			Blue				Green			1.1
1.1.2		Orange			Blue					Green		1.1
1.1.3		Orange			Blue						Green	1.1
1.2.0		Orange				Blue		Green				1.2
1.2.1		Orange				Blue			Green			1.2
1.2.2		Orange				Blue				Green		1.2
1.2.3		Orange				Blue					Green	1.2
2.0.0			Orange	Blue				Green				2.0
2.0.1			Orange	Blue					Green			2.0
2.0.2			Orange	Blue						Green		2.0
2.0.3			Orange	Blue							Green	2.0
2.1.0			Orange		Blue			Green				2.1
2.1.1			Orange		Blue				Green			2.1
2.1.2			Orange		Blue					Green		2.1
2.1.3			Orange		Blue						Green	2.1
2.2.0			Orange			Blue		Green				2.2
2.2.1			Orange			Blue			Green			2.2
2.2.2			Orange			Blue				Green		2.2
2.2.3			Orange			Blue					Green	2.2