



Lampiran 1. Perhitungan dan Pengolahan Data Uji Kuantitatif Besi

a. Perhitungan 100 mL larutan FeCl_3 1000 ppm

$$\frac{1\text{mg}}{1000\text{ mL}} \times \frac{1000\text{ mL}}{100\text{ mL}} = 0,1\text{ g FeCl}_3$$

b. Perhitungan 100 mL larutan FeCl_3 100 ppm

$$V1 \times M1 = V2 \times M2$$

$$V1 \times 1000\text{ ppm} = 100\text{ mL} \times 100\text{ ppm}$$

$$V1 = \frac{100\text{ mL} \times 100\text{ ppm}}{1000\text{ ppm}} = 10\text{ mL larutan FeCl}_3\text{ 1000 ppm}$$

c. Perhitungan pembuatan larutan standar Fe

Larutan standar Fe 3 ppm

$$V1 = \frac{25\text{ mL} \times 3\text{ ppm}}{100\text{ ppm}} = 0,75\text{ mL larutan FeCl}_3\text{ 100 ppm}$$

Larutan standar Fe 4 ppm

$$V1 = \frac{25\text{ mL} \times 4\text{ ppm}}{100\text{ ppm}} = 1\text{ mL larutan FeCl}_3\text{ 100 ppm}$$

Larutan standar Fe 5 ppm

$$V1 = \frac{25\text{ mL} \times 5\text{ ppm}}{100\text{ ppm}} = 1,25\text{ mL larutan FeCl}_3\text{ 100 ppm}$$

Larutan standar Fe 6 ppm

$$V1 = \frac{25\text{ mL} \times 6\text{ ppm}}{100\text{ ppm}} = 1,5\text{ mL larutan FeCl}_3\text{ 100 ppm}$$

Larutan standar Fe 7 ppm

$$V1 = \frac{25\text{ mL} \times 7\text{ ppm}}{100\text{ ppm}} = 1,75\text{ mL larutan FeCl}_3\text{ 100 ppm}$$

Larutan standar Fe 8 ppm

$$V1 = \frac{25\text{ mL} \times 8\text{ ppm}}{100\text{ ppm}} = 2\text{ mL larutan FeCl}_3\text{ 100 ppm}$$

d. Penentuan Kadar Besi

Nama sampel	Nilai Absorbansi					Rata-rata absorbansi (y)
	Pengulangan ke-					
	1	2	3	4	5	
Air Proses						
Blangko	0,205	0,204	0,203	0,200	0,206	0,204
Sampel a	0,159	0,158	0,156	0,151	0,155	0,156
Sampel b	0,089	0,082	0,076	0,072	0,086	0,081
Sampel c	0,068	0,067	0,068	0,068	0,068	0,068
Sampel d	0,042	0,043	0,041	0,042	0,042	0,042
Sampel e	0,030	0,031	0,031	0,029	0,030	0,030

Persamaan regresi: $y = 0,2061x - 0,6218$

$$x = \frac{y + 0,6218}{0,2061}$$

Nama Sampel	Perhitungan Kadar Besi	Kadar Besi (x)
Air Proses	$x = \frac{0,051 + 0,6218}{0,2061}$	3,264 mg/L
Blangko	$x = \frac{0,204 + 0,6218}{0,2061}$	4,005 mg/L
Sampel a	$x = \frac{0,156 + 0,6218}{0,2061}$	3,773 mg/L
Sampel b	$x = \frac{0,081 + 0,6218}{0,2061}$	3,410 mg/L
Sampel c	$x = \frac{0,068 + 0,6218}{0,2061}$	3,346 mg/L
Sampel d	$x = \frac{0,042 + 0,6218}{0,2061}$	3,221 mg/L
Sampel e	$x = \frac{0,030 + 0,6218}{0,2061}$	3,164 mg/L

Lampiran 2. Perhitungan dan Pengolahan Data Uji Kesadahan

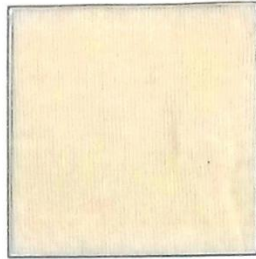
Nama Sampel	Volume Titration (mL)		Calculation of Hardness	Hardness (°dH)
	I	II		
Blanko	2,6	2,5	$\frac{2,6 + 2,5}{2} \text{ mL} \times 0,01 \text{ mol/L} \times \frac{1000 \text{ mL}}{25 \text{ mL}} \times 5,6$	5,71
Sampel a	2,4	2,4	$\frac{2,4 + 2,4}{2} \text{ mL} \times 0,01 \text{ mol/L} \times \frac{1000 \text{ mL}}{25 \text{ mL}} \times 5,6$	5,38
Sampel b	2,1	2,1	$\frac{2,1 + 2,1}{2} \text{ mL} \times 0,01 \text{ mol/L} \times \frac{1000 \text{ mL}}{25 \text{ mL}} \times 5,6$	4,70
Sampel c	0,6	0,6	$\frac{0,6 + 0,6}{2} \text{ mL} \times 0,01 \text{ mol/L} \times \frac{1000 \text{ mL}}{10 \text{ mL}} \times 5,6$	3,36
Sampel d	1,2	1,1	$\frac{1,2 + 1,1}{2} \text{ mL} \times 0,01 \text{ mol/L} \times \frac{1000 \text{ mL}}{25 \text{ mL}} \times 5,6$	2,58
Sampel e	0,4	0,4	$\frac{2,4 + 2,4}{2} \text{ mL} \times 0,01 \text{ mol/L} \times \frac{1000 \text{ mL}}{10 \text{ mL}} \times 5,6$	2,24

Lampiran 3. Data Hasil Uji Derajat Putih

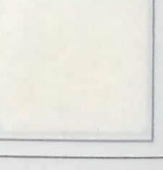
Nama sampel	Nilai Derajat Putih					Rata-rata Nilai Derajat Putih
	Pengulangan ke-					
	1	2	3	4	5	
Blangko	73,05	72,69	72,09	75,02	74,32	73,43
Sampel a	78,41	77,15	77,66	79,78	80,63	78,73
Sampel b	82,94	83,9	85,16	85,06	81,58	83,73
Sampel c	87,98	87,9	88,45	87,25	86,48	87,61
Sampel d	88,29	88,85	87,62	88,52	88,33	88,32
Sampel e	85,08	86,84	87,6	85,03	85,44	86,00



Lampiran 4. Kain Kapas Greige (32 Combed Single Knit)



Lampiran 5. Kain Kapas Hasil Percobaan (32 Combed Single Knit)

Nama Sampel	Konsentrasi Asam Sitrat	Kain Kapas Hasil Percobaan
Blangko	Tanpa proses demineralisasi kain	
Sampel a	0 g/L	
Sampel b	5 g/L	
Sampel c	10 g/L	
Sampel d	15 g/L	
Sampel e	20 g/L	

Lampiran 6. Data Hasil Uji Kekuatan Jebol Kain Rajut Kapas

Sampel	<i>Greige</i> (kg/cm ²)	Blangko (kg/cm ²)	sampel a kg/cm ²	sampel b kg/cm ²	sampel c kg/cm ²	sampel d kg/cm ²	sampel e kg/cm ²
Pengulangan ke-							
1	6,21	5,14	5,36	5,29	5,30	5,33	4,6
2	4,53	5,03	5,39	5,24	5,81	4,95	5,18
3	6,59	5,04	5,32	4,86	5,63	5,48	5,18
4	6,22	5,36	4,98	5,14	4,69	5,50	5,07
5	5,93	5,05	5,09	4,68	6,17	5,92	4,97
6	6,53	4,48	4,89	5,19	5,56	5,56	5,38
7	5,95	4,62	5,43	5,47	5,75	5,18	5,79
8	6,5	4,77	4,82	5,54	5,78	5,50	5,71
9	6,06	4,26	4,68	4,63	6,04	5,55	5,89
10	6,58	5,71	5,03	5,53	5,62	5,81	5,42
Rata-rata	6,11	4,946	5,099	5,157	5,635	5,478	5,319
Standar Deviasi	0,61	0,43	0,26	0,33	0,41	0,28	0,40
Koefisien Variasi	0,01	8,64	5,18	6,47	7,31	5,12	7,56