



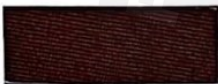








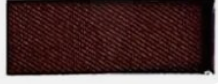

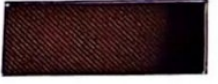


LAMPIRAN

Lampiran 1. 1 Kain hasil percobaan



| Penurunan Resep | <i>Formaldehyde catcher atau Air Clean</i> | | | |
|-------------------|--|--|--|--|
| | 24 ml/L | 32 ml/L | 40 ml/L | 48 ml/L |
| 0% (Resep Normal) |  |  |  |  |
| 20% |  |  |  |  |
| 40% |  |  |  |  |
| 60% |  |  |  |  |

Lampiran 1. 2 Data pemilihan kondisi optimum

| Penguji an | Standar pabrik | | Resep normal | | | | Resep turun 20% | | | | Resep turun 40% | | | | Resep turun 60% | | | |
|-------------------------|----------------|-----------|------------------|-------------|-------------|-------------|-----------------|-------------|-------------|-------------|-----------------|------------|------------|------------|-----------------|------------|------------|------------|
| | | | <i>Air clean</i> | | | | | | | | | | | | | | | |
| | | | 24 | 32 | 40 | 48 | 24 | 32 | 40 | 48 | 24 | 32 | 40 | 48 | 24 | 32 | 40 | 48 |
| Kekakuan Kain | Lusi | 20 mg. cm | 45,0 54 | 38,0 45 | 39,2 09 | 38,0 25 | 33,0 88 | 30,6 06 | 29,9 50 | 25,3 35 | 20,2 61 | 19,8 62 | 19,7 41 | 19,0 94 | 18,0 29 | 18,0 90 | 17,2 00 | 16,7 62 |
| | Pakan | 12 mg. cm | 27,7 83 | 18,0 49 | 17,8 47 | 17,7 70 | 15,2 27 | 16,0 43 | 14,4 24 | 14,9 99 | 12,4 94 | 12,0 31 | 12,3 11 | 11,3 13 | 9,15 4 | 9,62 3 | 10,1 03 | 8,83 4 |
| Kelangsain Kain | 68% | | 97,5 6 | 97,3 2 | 93,9 5 | 93,6 6 | 89,9 6 | 88,9 6 | 88,1 7 | 76,9 3 | 72,6 3 | 72,2 4 | 68,3 4 | 67,4 8 | 66,5 0 | 66,2 1 | 65,8 7 | 64,6 5 |
| Kadar Formaldehid Bebas | ≤75 ppm | | 30,1 37 | 273, 887 | 244, 623 | 161, 262 | 173, 995 | 148, 953 | 110, 805 | 102, 432 | 111, 261 | 98,0 56 | 77,9 92 | 65,2 17 | 71,3 04 | 62,6 32 | 57,2 08 | 53,1 91 |
| Beda Warna | < 1 | | 0,84 | 0,75 | 0,67 | 0,52 | 0,56 | 0,95 | 0,71 | 0,65 | 0,78 | 0,58 | 0,73 | 0,56 | 0,66 | 0,72 | 0,49 | 0,36 |

Keterangan:

- Nilai toleransi Kekakuan kain arah lusi dan pakan sebesar ± 2 mg.cm.
- Nilai toleransi untuk Kelangsain kain kain sebesar ± 2 %.

Lampiran 1. 3 Data kekakuan kain

| Penurunan Resep | Variasi ke- | Variasi Air Clean | Berat Kain (gram) | W | Panjang Lengkung Rata-rata | | Kekakuan Lentur | |
|-----------------|-------------|-------------------|-------------------|---------|----------------------------|-------|-----------------|--------|
| | | | | | Lusi | Pakan | Lusi | Pakan |
| Kain Blanko | 0 | 0 mL | 2.135 | 213.500 | 0.735 | 0.579 | 8.492 | 4.148 |
| 0% | 1 | 24 mL | 2.330 | 233.000 | 1.246 | 1.060 | 45.054 | 27.783 |
| | 2 | 32 mL | 2.296 | 229.600 | 1.183 | 0.923 | 38.045 | 18.049 |
| | 3 | 40 mL | 2.317 | 231.700 | 1.192 | 0.917 | 39.209 | 17.847 |
| | 4 | 48 mL | 2.307 | 230.700 | 1.181 | 0.917 | 38.025 | 17.770 |
| 20% | 5 | 24 mL | 2.273 | 227.300 | 1.133 | 0.875 | 33.088 | 15.227 |
| | 6 | 32 mL | 2.263 | 226.300 | 1.098 | 0.892 | 30.606 | 16.043 |
| | 7 | 40 mL | 2.248 | 224.800 | 1.108 | 0.863 | 29.950 | 14.424 |
| | 8 | 48 mL | 2.255 | 225.500 | 1.127 | 0.873 | 25.335 | 14.999 |
| 40% | 9 | 24 mL | 2.242 | 224.200 | 0.960 | 0.823 | 20.261 | 12.494 |
| | 10 | 32 mL | 2.243 | 224.300 | 0.958 | 0.813 | 19.862 | 12.031 |
| | 11 | 40 mL | 2.243 | 224.300 | 0.967 | 0.819 | 19.741 | 12.311 |
| | 12 | 48 mL | 2.227 | 222.700 | 0.950 | 0.798 | 19.094 | 11.313 |
| 60% | 13 | 24 mL | 2.188 | 218.800 | 0.938 | 0.748 | 18.029 | 9.154 |
| | 14 | 32 mL | 2.225 | 222.500 | 0.933 | 0.756 | 18.090 | 9.623 |
| | 15 | 40 mL | 2.188 | 218.800 | 0.923 | 0.773 | 17.200 | 10.103 |
| | 16 | 48 mL | 2.180 | 218.000 | 0.917 | 0.740 | 16.792 | 8.834 |

Lampiran 1. 4 Data kelangsaan kain

| Penurunan Resep | Variasi | Variasi Air Clean | Kelangsaan Kain | | Rata-rata |
|-----------------|---------|-------------------|-----------------|---------------|-----------|
| | | | Muka Depan | Muka Belakang | |
| KAIN BLANKO | 0 | | 51.95% | 51.08% | 51.52% |
| 0% | 1 | 24 mL | 97.39% | 97.73% | 97.56% |
| | 2 | 32 mL | 99.68% | 94.95% | 97.32% |
| | 3 | 40 mL | 96.33% | 91.57% | 93.95% |
| | 4 | 48 mL | 97.65% | 89.66% | 93.66% |
| 20% | 5 | 24 mL | 87.78% | 92.14% | 89.96% |
| | 6 | 32 mL | 88.79% | 89.12% | 88.96% |
| | 7 | 40 mL | 91.40% | 84.94% | 88.17% |
| | 8 | 48 mL | 81.92% | 71.94% | 76.93% |
| 40% | 9 | 24 mL | 73.31% | 71.94% | 72.63% |
| | 10 | 32 mL | 73.80% | 70.67% | 72.24% |
| | 11 | 40 mL | 66.30% | 70.37% | 68.34% |
| | 12 | 48 mL | 68.44% | 66.52% | 67.48% |
| 60% | 13 | 24 mL | 64.49% | 68.51% | 66.50% |
| | 14 | 32 mL | 65.06% | 67.36% | 66.21% |
| | 15 | 40 mL | 69.42% | 62.32% | 65.87% |
| | 16 | 48 mL | 64.48% | 64.64% | 64.56% |

Lampiran 1. 5 Data kandungan formaldehid bebas pada kain

| Penurunan Resep | Variasi | Air Clean | Kandungan Formaldehid Bebas | | | Rata-rata |
|------------------------|---------|-----------|-----------------------------|----------|----------|-----------|
| | | | Sampel 1 | Sampel 2 | Sampel 3 | |
| Kain <i>Dyeing Out</i> | 0 | 0 mL | 10.770 | 12.800 | 13.090 | 12.220 |
| 0% | 1 | 24 mL | 305.940 | 305.510 | 309.960 | 307.137 |
| | 2 | 32 mL | 274.960 | 273.970 | 272.730 | 273.887 |
| | 3 | 40 mL | 244.360 | 245.460 | 244.050 | 244.623 |
| | 4 | 48 mL | 163.379 | 160.110 | 160.297 | 161.262 |
| 20% | 5 | 24 mL | 173.056 | 173.970 | 174.960 | 173.995 |
| | 6 | 32 mL | 151.440 | 148.870 | 146.550 | 148.953 |
| | 7 | 40 mL | 110.546 | 110.990 | 110.880 | 110.805 |
| | 8 | 48 mL | 98.550 | 98.672 | 110.075 | 102.432 |
| 40% | 9 | 24 mL | 110.452 | 113.180 | 110.150 | 111.261 |
| | 10 | 32 mL | 96.837 | 98.620 | 98.710 | 98.056 |
| | 11 | 40 mL | 77.437 | 77.220 | 79.320 | 77.992 |
| | 12 | 48 mL | 65.901 | 64.920 | 64.830 | 65.217 |
| 60% | 13 | 24 mL | 70.420 | 70.921 | 72.570 | 71.304 |
| | 14 | 32 mL | 62.000 | 63.881 | 62.016 | 62.632 |
| | 15 | 40 mL | 57.605 | 57.870 | 56.150 | 57.208 |
| | 16 | 48 mL | 49.321 | 55.901 | 54.350 | 53.191 |

Lampiran 1. 6 Data beda warna

| Kain sampel | L* | a* | b* | C* | h | ΔL^* | Δa^* | Δb^* | ΔC^* | ΔH^* | ΔE^*_{ab} |
|-----------------------|-------|------|------|------|-------|--------------|--------------|--------------|--------------|--------------|-------------------|
| Target | 27.99 | 2.15 | 4.54 | 5.03 | 64.67 | | | | | | |
| Resep Normal AC 24 | 27.97 | 2.68 | 3.90 | 4.73 | 55.44 | -0.02 | 0.53 | -0.65 | -0.30 | -0.78 | 0.84 |
| Resep Normal AC 32 | 27.70 | 2.04 | 5.23 | 5.61 | 68.73 | -0.29 | -0.12 | 0.69 | 0.59 | 0.38 | 0.75 |
| Resep Normal AC 40 | 27.97 | 2.06 | 5.21 | 5.60 | 68.39 | -0.02 | -0.09 | 0.67 | 0.58 | 0.34 | 0.67 |
| Resep Normal AC 48 | 28.10 | 1.72 | 4.80 | 5.10 | 70.33 | 0.10 | -0.43 | 0.26 | 0.07 | 0.50 | 0.52 |
| Resep Turun 20% AC 24 | 28.18 | 2.10 | 5.07 | 5.49 | 67.50 | 0.19 | -0.05 | 0.52 | 0.46 | 0.26 | 0.56 |
| Resep Turun 20% AC 32 | 28.78 | 2.50 | 4.95 | 5.54 | 63.21 | 0.78 | 0.35 | 0.40 | 0.51 | -0.13 | 0.95 |
| Resep Turun 20% AC 40 | 28.10 | 2.85 | 4.51 | 5.33 | 57.65 | 0.10 | 0.70 | -0.04 | 0.31 | -0.63 | 0.71 |
| Resep Turun 20% AC 48 | 28.15 | 2.77 | 4.64 | 5.40 | 59.16 | 0.16 | 0.62 | 0.09 | 0.37 | -0.50 | 0.65 |
| Resep Turun 40% AC 24 | 27.91 | 2.00 | 5.31 | 5.68 | 69.34 | -0.08 | -0.15 | 0.77 | 0.65 | 0.44 | 0.78 |
| Resep Turun 40% AC 32 | 28.44 | 2.47 | 4.73 | 5.34 | 62.42 | 0.45 | 0.32 | 0.19 | 0.31 | -0.20 | 0.58 |
| Resep Turun 40% AC 40 | 28.72 | 2.11 | 4.55 | 5.01 | 65.11 | 0.73 | -0.04 | 0.00 | -0.02 | 0.04 | 0.73 |
| Resep Turun 40% AC 48 | 28.47 | 2.44 | 4.59 | 5.19 | 62.03 | 0.48 | 0.29 | 0.04 | 0.17 | -0.24 | 0.56 |
| Resep Turun 60% AC 24 | 28.25 | 2.47 | 5.06 | 5.63 | 64.01 | 0.26 | 0.32 | 0.52 | 0.06 | -0.06 | 0.66 |
| Resep Turun 60% AC 32 | 28.34 | 2.68 | 4.88 | 5.57 | 61.22 | 0.35 | 0.53 | 0.33 | 0.54 | -0.32 | 0.72 |
| Resep Turun 60% AC 40 | 28.29 | 2.46 | 4.33 | 4.98 | 60.33 | 0.30 | 0.31 | -0.22 | -0.05 | -0.38 | 0.49 |
| Resep Turun 60% AC 48 | 28.34 | 2.25 | 4.53 | 5.06 | 63.64 | 0.35 | 0.10 | -0.01 | 0.03 | -0.09 | 0.36 |