

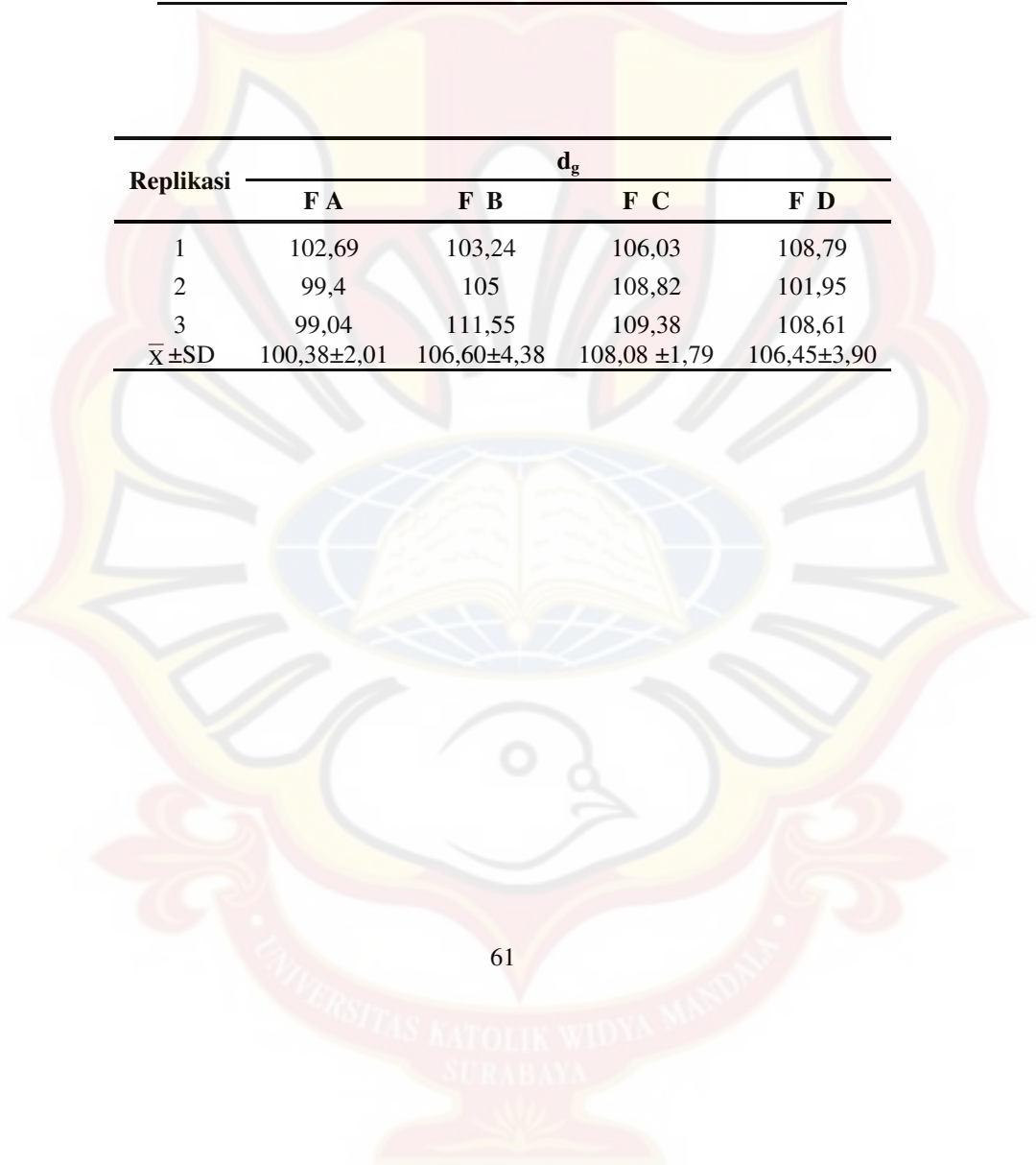
**LAMPIRAN A**  
**HASIL UJI MUTU FISIK MASSA TABLET**

| Mutu fisik<br>yang diuji               | Replikasi | Formula Tablet Likuisolid<br>Piroksikam |       |       |       | Persyaratan                          |
|--|-----------|---|-------|-------|-------|--------------------------------------|
|  |           | F A                                     | F B   | F C   | F D   |                                      |
| Sudut Diam<br>(derajat)                | I         | 34,7                                    | 25,11 | 28,1  | 28,98 | 25-40=<br>Cukup Baik<br>(Wells,1988) |
|  | II        | 31,32                                   | 26,11 | 26,61 | 28,47 |                                      |
|  | III       | 31,57                                   | 27,08 | 26,95 | 30,44 |                                      |
|  | $\bar{x}$ | 32,53                                   | 26,1  | 27,22 | 29,30 |                                      |
|  | SD        | 1,88                                    | 0,09  | 0,78  | 1,02  |                                      |
|  |           |   |       |       |       |                                      |
| Hausner Ratio                          | I         | 1,23                                    | 1,18  | 1,19  | 1,19  | < 1,25<br>(Davies,2001)              |
|  | II        | 1,25                                    | 1,18  | 1,18  | 1,18  |                                      |
|  | III       | 1,23                                    | 1,14  | 1,16  | 1,2   |                                      |
|  | $\bar{x}$ | 1,24                                    | 1,17  | 1,18  | 1,19  |                                      |
|  | SD        | 0,01                                    | 0,02  | 0,02  | 0,01  |                                      |
|  |           |   |       |       |       |                                      |
| Carr's Index<br>kompresibilitas<br>(%) | I         | 18,99                                   | 15,01 | 16    | 16    | 12-16=<br>Baik<br>(Siregar,1992)     |
|  | II        | 19,99                                   | 15    | 15    | 15    |                                      |
|  | III       | 19                                      | 12    | 13,5  | 17    |                                      |
|  | $\bar{x}$ | 19,33                                   | 14,00 | 14,83 | 16    |                                      |
|  | SD        | 0,57                                    | 0,57  | 1,26  | 1     |                                      |
|  |           |   |       |       |       |                                      |

**LAMPIRAN B**  
**HASIL UJI DISTRIBUSI UKURAN PARTIKEL**

| Replikasi        | $\sigma_g$      |                 |                 |                 |
|------------------|-----------------|-----------------|-----------------|-----------------|
|                  | F A             | F B             | F C             | F D             |
| 1                | 1,93            | 2,35            | 2,02            | 1,88            |
| 2                | 1,96            | 2,43            | 1,86            | 1,88            |
| 3                | 1,93            | 1,90            | 1,83            | 1,87            |
| $\bar{x} \pm SD$ | 1,94 $\pm$ 0,01 | 2,23 $\pm$ 0,28 | 1,90 $\pm$ 0,10 | 1,88 $\pm$ 0,01 |

| Replikasi        | $d_g$             |                   |                   |                   |
|------------------|-------------------|-------------------|-------------------|-------------------|
|                  | F A               | F B               | F C               | F D               |
| 1                | 102,69            | 103,24            | 106,03            | 108,79            |
| 2                | 99,4              | 105               | 108,82            | 101,95            |
| 3                | 99,04             | 111,55            | 109,38            | 108,61            |
| $\bar{x} \pm SD$ | 100,38 $\pm$ 2,01 | 106,60 $\pm$ 4,38 | 108,08 $\pm$ 1,79 | 106,45 $\pm$ 3,90 |



LAMPIRAN C

HASIL UJI KEKERASAN TABLET LIKUISOLID PIROKSIKAM

BATCH I

| No               | Kekerasan Tablet Likuisolid Piroksikam (kp) |           |            |            |
|------------------|---|-----------|------------|------------|
|                  | F I   | F II      | F III      | F IV       |
| 1                | 16,3  | 16,3      | 16,3       | 16,3       |
| 2                | 16,3  | 16,3      | 16,3       | 16,3       |
| 3                | 16,3  | 16,3      | 16,3       | 16,3       |
| 4                | 16,3  | 16,3      | 16,3       | 16,3       |
| 5                | 16,3  | 16,3      | 16,3       | 16,3       |
| 6                | 16,3  | 16,3      | 16,3       | 16,3       |
| $\bar{X} \pm SD$ | 16,3 ± 0                                    | 16,33 ± 0 | 16,3 ± 0,0 | 16,3 ± 0,0 |
| SD rel (%)       | 0   | 0         | 0          | 0          |

BATCH II

| No               | Kekerasan Tablet Likuisolid Piroksikam (kp) |             |              |             |
|------------------|---|-------------|--------------|-------------|
|                  | F I   | F II        | F III        | F IV        |
| 1                | 16,3  | 7,55        | 13,03        | 15,23       |
| 2                | 16,3  | 7,24        | 12,77        | 15,04       |
| 3                | 16,3  | 7,36        | 12,71        | 14,85       |
| 4                | 16,3  | 7,55        | 12,65        | 13,59       |
| 5                | 16,3  | 7,63        | 12,59        | 14,09       |
| 6                | 16,3  | 7,17        | 12,46        | 13,4        |
| $\bar{X} \pm SD$ | 16,3 ± 0,0                                  | 7,37 ± 0,16 | 12,70 ± 0,19 | 14,4 ± 0,78 |
| SD rel (%)       | 0   | 2,12        | 1,52         | 5,43        |

BATCH III

| No               | Kekerasan Tablet Likuisolid Piroksikam (kp) |              |             |              |
|------------------|---|--------------|-------------|--------------|
|                  | F I   | F II         | F III       | F IV         |
| 1                | 16,36                                       | 16,3         | 7,99        | 12,08        |
| 2                | 15,86                                       | 16,05        | 8,05        | 12,08        |
| 3                | 16,3  | 16,3         | 8,24        | 12,21        |
| 4                | 13,72                                       | 16,05        | 8,31        | 12,65        |
| 5                | 16,3  | 16,3         | 8,62        | 12,59        |
| 6                | 16,3  | 16,3         | 8,43        | 12,33        |
| $\bar{X} \pm SD$ | 15,81 ± 1,04                                | 16,22 ± 0,13 | 8,27 ± 0,24 | 12,32 ± 0,25 |
| SD (%)           | 6,57  | 0,80         | 2,85        | 2,02         |

**LAMPIRAN D**  
**HASIL UJI KERAPUHAN TABLET LIKUISOLID PIROKSIKAM**

| Formula | Replikasi | Berat awal (gram) | Berat akhir (gram) | Kerapuhan (%) | $\bar{x} \pm SD$ | SDrel (%) |
|---------|-----------|-------------------|--------------------|---------------|------------------|-----------|
| A       | 1         |                   |                    | 1,52          | 0,51             | 170,67    |
|         | 2         |                   |                    | 0             | ±                |           |
|         | 3         |                   |                    | 0,015         | 0,87             |           |
| B       | 1         | 12,94             | 12,91              | 0,03          | 0,02             | 24,74     |
|         | 2         | 12,72             | 12,70              | 0,02          | ±                |           |
|         | 3         | 12,75             | 12,73              | 0,02          | 0,01             |           |
| C       | 1         | 12,96             | 12,945             | 0,015         | 0,02             | 33,33     |
|         | 2         | 12,90             | 12,89              | 0,01          | ±                |           |
|         | 3         | 12,88             | 12,86              | 0,02          | 0,01             |           |
| D       | 1         | 12,86             | 12,83              | 0,03          | 0,04             | 15,75     |
|         | 2         | 12,77             | 12,73              | 0,04          | ±                |           |
|         | 3         | 12,83             | 12,79              | 0,04          | 0,01             |           |

**LAMPIRAN E**  
**HASIL UJI WAKTU HANCUR TABLET LIKUISOLID**  
**PIROKSIKAM**

| Replikasi        | Waktu Hancur (menit) |           |           |            |
|------------------|----------------------|-----------|-----------|------------|
|                  | F A                  | F B       | F C       | F D        |
| 1                | 2                    | 3         | 3         | 3          |
| 2                | 1                    | 2         | 3         | 2          |
| 3                | 1                    | 2         | 2         | 3          |
| $\bar{X} \pm SD$ | 1,33±0,58            | 2,33±0,71 | 2,67±0,58 | 2,67 ±0,58 |



**LAMPIRAN F**  
**HASIL UJI KERAGAMAN BOBOT TABLET LIKUISOLID**  
**PIROKSIKAM**

Hasil Uji Keragaman Bobot Tablet Formula A

| No        | Replikasi I       |       | Replikasi II      |       | Replikasi III     |       |
|-----------|-------------------|-------|-------------------|-------|-------------------|-------|
|           | Bobot Tablet (mg) | Y (%) | Bobot Tablet (mg) | Y (%) | Bobot Tablet (mg) | Y (%) |
| 1         | 668,3             | 96,76 | 661,3             | 95,16 | 664,3             | 96,45 |
| 2         | 677,2             | 98,05 | 663,2             | 95,43 | 665,1             | 96,57 |
| 3         | 666,8             | 96,55 | 655,0             | 94,25 | 666,2             | 96,73 |
| 4         | 663,7             | 96,10 | 634,9             | 91,36 | 649,4             | 94,29 |
| 5         | 674,4             | 97,65 | 653,2             | 93,99 | 651,2             | 94,55 |
| 6         | 656,0             | 94,98 | 678,3             | 97,61 | 662,0             | 96,12 |
| 7         | 667,8             | 96,69 | 659,0             | 94,83 | 663,5             | 96,34 |
| 8         | 675,9             | 97,86 | 656,3             | 94,44 | 651,0             | 94,52 |
| 9         | 674,7             | 97,69 | 661,6             | 95,20 | 648,8             | 94,20 |
| 10        | 668,4             | 96,78 | 638,1             | 91,82 | 640,6             | 93,01 |
| $\bar{X}$ | 669,32            | 96,91 | 656,09            | 94,41 | 656,21            | 95,28 |
| SD        |                   | 0,94  |                   | 1,79  |                   | 1,31  |
| SDrel(%)  |                   | 0,97  |                   | 1,90  |                   | 1,37  |



Hasil Uji Keragaman Bobot Tablet Formula B

| No        | Replikasi I       |        | Replikasi II      |       | Replikasi III     |       |
|-----------|-------------------|--------|-------------------|-------|-------------------|-------|
|           | Bobot Tablet (mg) | Y (%)  | Bobot Tablet (mg) | Y (%) | Bobot Tablet (mg) | Y (%) |
| 1         | 667,5             | 101,98 | 661,3             | 96,45 | 654,5             | 93,55 |
| 2         | 656,3             | 100,27 | 659,7             | 96,21 | 656               | 93,76 |
| 3         | 657,2             | 100,40 | 660               | 96,26 | 657,2             | 93,93 |
| 4         | 655,60            | 100,16 | 653,6             | 95,32 | 649,7             | 92,86 |
| 5         | 649,50            | 99,23  | 657,7             | 95,92 | 653,4             | 93,39 |
| 6         | 659,10            | 100,69 | 665,8             | 97,10 | 658,2             | 94,07 |
| 7         | 650,50            | 99,38  | 661               | 96,40 | 653,9             | 93,46 |
| 8         | 657,20            | 100,40 | 655               | 95,52 | 658               | 94,05 |
| 9         | 648,00            | 98,99  | 649,7             | 94,75 | 656               | 93,76 |
| 10        | 647,20            | 98,88  | 656,5             | 95,75 | 661,6             | 94,56 |
| $\bar{X}$ | 654,81            | 100,04 | 658,03            | 95,97 | 655,85            | 93,74 |
| SD        |                   | 0,94   |                   | 0,66  |                   | 0,46  |
| SDrel(%)  |                   | 0,94   |                   | 0,69  |                   | 0,49  |

Hasil Uji Keragaman Bobot Tablet Formula C

| No        | Replikasi I       |       | Replikasi II      |       | Replikasi III     |       |
|-----------|-------------------|-------|-------------------|-------|-------------------|-------|
|           | Bobot Tablet (mg) | Y (%) | Bobot Tablet (mg) | Y (%) | Bobot Tablet (mg) | Y (%) |
| 1         | 643,5             | 94,55 | 648,5             | 97,56 | 652               | 97,29 |
| 2         | 651,8             | 95,77 | 651,1             | 97,96 | 650,6             | 97,09 |
| 3         | 656,6             | 96,48 | 644               | 96,89 | 661,8             | 98,76 |
| 4         | 651               | 95,65 | 652,6             | 98,18 | 643,7             | 96,06 |
| 5         | 652,5             | 95,87 | 641,7             | 96,54 | 654,8             | 97,71 |
| 6         | 653,3             | 95,99 | 647,8             | 97,46 | 660,5             | 98,56 |
| 7         | 652               | 95,80 | 653               | 98,24 | 640,2             | 95,53 |
| 8         | 658,4             | 96,74 | 649,9             | 97,78 | 650               | 96,99 |
| 9         | 652,7             | 95,90 | 638,9             | 96,12 | 648               | 96,69 |
| 10        | 661               | 97,12 | 643,7             | 96,84 | 653,3             | 97,49 |
| $\bar{X}$ | 653,28            | 95,99 | 647,12            | 97,36 | 651,49            | 97,22 |
| SD        |                   | 0,69  |                   | 0,72  |                   | 1,00  |
| SDrel(%)  |                   | 0,73  |                   | 0,74  |                   | 1,03  |

Hasil Uji Keragaman Bobot Tablet Formula D

| No        | Replikasi I       |        | Replikasi II      |       | Replikasi III     |       |
|-----------|-------------------|--------|-------------------|-------|-------------------|-------|
|           | Bobot Tablet (mg) | Y (%)  | Bobot Tablet (mg) | Y (%) | Bobot Tablet (mg) | Y (%) |
| 1         | 658,9             | 100,36 | 651,7             | 95,71 | 648,8             | 96,23 |
| 2         | 656,1             | 99,94  | 648               | 95,17 | 664,7             | 98,59 |
| 3         | 663,3             | 101,03 | 654,7             | 96,15 | 657               | 97,45 |
| 4         | 654               | 99,62  | 663               | 97,37 | 650,2             | 96,44 |
| 5         | 649,7             | 98,96  | 656,4             | 96,40 | 654,9             | 97,14 |
| 6         | 653,9             | 99,60  | 658,2             | 96,67 | 645,8             | 95,79 |
| 7         | 665               | 101,29 | 653,9             | 96,03 | 656,2             | 97,33 |
| 8         | 650,5             | 99,08  | 656,8             | 96,46 | 656,5             | 97,38 |
| 9         | 655,5             | 99,84  | 650,4             | 95,52 | 657,8             | 97,57 |
| 10        | 658,3             | 100,27 | 657,9             | 96,62 | 645,6             | 95,76 |
| $\bar{X}$ | 656,52            | 100    | 655,1             | 96,21 | 653,75            | 96,97 |
| SD        |                   | 0,76   |                   | 0,64  |                   | 0,89  |
| SDrel(%)  |                   | 0,76   |                   | 0,66  |                   | 0,92  |



LAMPIRAN G

HASIL UJI KESERAGAMAN KANDUNGAN TABLET  
LIKUISOLID PIROKSIKAM

Hasil Uji Keragaman Kandungan Tablet Formula A *Batch I*

| <b>Abs</b> | <b>C sampel</b> | <b>W sampel</b> | <b>C teoritis</b> | <b>Kadar (persen)</b> |
|------------|-----------------|-----------------|-------------------|-----------------------|
| 0,455      | 5,58            | 651,6           | 6,01              | 92,78                 |
| 0,456      | 5,59            | 665,3           | 6,14              | 91,08                 |
| 0,452      | 5,54            | 657,7           | 6,07              | 91,29                 |
| 0,464      | 5,70            | 656,7           | 6,06              | 93,97                 |
| 0,45       | 5,52            | 656,7           | 6,06              | 91,01                 |
| 0,456      | 5,59            | 651,3           | 6,01              | 93,04                 |
| 0,461      | 5,66            | 653,5           | 6,03              | 93,79                 |
| 0,458      | 5,62            | 633,3           | 5,85              | 96,12                 |
| 0,474      | 5,82            | 649,9           | 6,00              | 97,09                 |
| 0,48       | 5,90            | 655,5           | 6,05              | 97,53                 |
|            |                 |                 | X                 | 93,77                 |
|            |                 |                 | SD                | 2,43                  |
|            |                 |                 | KV                | 2,59                  |

Hasil Uji Keragaman Kandungan Tablet Formula A *Batch II*

| <b>Abs</b> | <b>C sampel</b> | <b>W sampel</b> | <b>C teoritis</b> | <b>Kadar (persen)</b> |
|------------|-----------------|-----------------|-------------------|-----------------------|
| 0,456      | 5,59            | 651,3           | 6,01              | 93,04                 |
| 0,458      | 5,62            | 647,2           | 5,97              | 94,06                 |
| 0,45       | 5,52            | 653,9           | 6,04              | 91,40                 |
| 0,451      | 5,53            | 658,3           | 6,08              | 91,00                 |
| 0,442      | 5,41            | 629,3           | 5,81              | 93,20                 |
| 0,454      | 5,57            | 640,5           | 5,91              | 94,18                 |
| 0,461      | 5,66            | 645,3           | 5,96              | 94,98                 |
| 0,458      | 5,62            | 651,2           | 6,01              | 93,48                 |
| 0,456      | 5,59            | 650,5           | 6,00              | 93,15                 |
| 0,454      | 5,57            | 647,3           | 5,98              | 93,19                 |
|            |                 |                 | X                 | 93,17                 |
|            |                 |                 | SD                | 1,21                  |
|            |                 |                 | KV                | 1,29                  |

Hasil Uji Keragaman Kandungan Tablet Formula A *Batch* III

| <b>Abs</b> | <b>C sampel</b> | <b>W sampel</b> | <b>C teoritis</b> | <b>Kadar (persen)</b> |
|------------|-----------------|-----------------|-------------------|-----------------------|
| 0,465      | 5,71            | 643,3           | 5,94              | 96,14                 |
| 0,466      | 5,72            | 659,6           | 6,09              | 93,98                 |
| 0,447      | 5,48            | 640,6           | 5,91              | 92,64                 |
| 0,456      | 5,59            | 663,5           | 6,12              | 91,33                 |
| 0,462      | 5,67            | 652,8           | 6,03              | 94,10                 |
| 0,459      | 5,63            | 653,7           | 6,03              | 93,34                 |
| 0,461      | 5,66            | 652,8           | 6,03              | 93,89                 |
| 0,457      | 5,61            | 647,3           | 5,98              | 93,83                 |
| 0,465      | 5,71            | 651,4           | 6,01              | 94,95                 |
| 0,463      | 5,68            | 649,8           | 6,00              | 94,75                 |
|            |                 |                 | X                 | 93,89                 |
|            |                 |                 | SD                | 1,31                  |
|            |                 |                 | KV                | 1,39                  |

Hasil Uji Keragaman Kandungan Tablet Formula B *Batch* I

| <b>Abs</b> | <b>C sampel</b> | <b>W sampel</b> | <b>C teoritis</b> | <b>Kadar (persen)</b> |
|------------|-----------------|-----------------|-------------------|-----------------------|
| 0,515      | 6,35            | 667,1           | 6,16              | 103,08                |
| 0,471      | 5,78            | 657,5           | 6,07              | 95,22                 |
| 0,458      | 5,62            | 660,8           | 6,1               | 92,13                 |
| 0,477      | 5,86            | 654,9           | 6,05              | 96,86                 |
| 0,489      | 6,01            | 660,9           | 6,1               | 98,52                 |
| 0,469      | 5,76            | 656,3           | 6,06              | 95,05                 |
| 0,479      | 5,89            | 657             | 6,06              | 97,19                 |
| 0,481      | 5,91            | 658,3           | 6,08              | 97,2                  |
| 0,483      | 5,94            | 653,4           | 6,03              | 98,51                 |
| 0,485      | 5,96            | 660,2           | 6,09              | 97,87                 |
|            |                 |                 | X                 | 97,16                 |
|            |                 |                 | SD                | 2,84                  |
|            |                 |                 | KV                | 2,93                  |

Hasil Uji Keragaman Kandungan Tablet Formula B *Batch* II

| <b>Abs</b> | <b>C sampel</b> | <b>W sampel</b> | <b>C teoritis</b> | <b>Kadar (persen)</b> |
|------------|-----------------|-----------------|-------------------|-----------------------|
| 0,465      | 5,71            | 655,2           | 6,05              | 94,41                 |
| 0,479      | 5,89            | 664             | 6,13              | 96,08                 |
| 0,472      | 5,8             | 659,4           | 6,09              | 95,24                 |
| 0,469      | 5,76            | 658,9           | 6,08              | 94,74                 |
| 0,465      | 5,71            | 656,2           | 6,06              | 94,22                 |
| 0,478      | 5,87            | 663,3           | 6,12              | 95,92                 |
| 0,461      | 5,66            | 659,5           | 6,09              | 92,94                 |
| 0,453      | 5,55            | 653,7           | 6,03              | 92,04                 |
| 0,477      | 5,86            | 661,4           | 6,11              | 95,91                 |
| 0,463      | 5,68            | 659,3           | 6,09              | 93,27                 |
|            |                 |                 | X                 | 94,48                 |
|            |                 |                 | SD                | 1,38                  |
|            |                 |                 | KV                | 1,46                  |

Hasil Uji Keragaman Kandungan Tablet Formula B *Batch* III

| <b>Abs</b> | <b>C sampel</b> | <b>W sampel</b> | <b>C teoritis</b> | <b>Kadar (persen)</b> |
|------------|-----------------|-----------------|-------------------|-----------------------|
| 0,456      | 5,59            | 655,8           | 6,16              | 90,75                 |
| 0,458      | 5,62            | 657,8           | 6,07              | 92,55                 |
| 0,444      | 5,44            | 654,8           | 6,04              | 90,01                 |
| 0,459      | 5,63            | 663,5           | 6,12              | 91,93                 |
| 0,45       | 5,51            | 663,3           | 6,12              | 90                    |
| 0,461      | 5,66            | 653,1           | 6,03              | 93,86                 |
| 0,453      | 5,55            | 661,6           | 6,11              | 90,83                 |
| 0,443      | 5,42            | 653,4           | 6,03              | 89,88                 |
| 0,457      | 5,6             | 659             | 6,08              | 92,11                 |
| 0,463      | 5,68            | 649,3           | 5,99              | 94,82                 |
|            |                 |                 | X                 | 91,67                 |
|            |                 |                 | SD                | 1,70                  |
|            |                 |                 | KV                | 1,86                  |

Hasil Uji Keragaman Kandungan Tablet Formula C *Batch I*

| <b>Abs</b> | <b>C sampel</b> | <b>W sampel</b> | <b>C teoritis</b> | <b>Kadar (persen)</b> |
|------------|-----------------|-----------------|-------------------|-----------------------|
| 0,466      | 5,72            | 654,7           | 6,04              | 94,7                  |
| 0,472      | 5,8             | 650,3           | 6,00              | 96,67                 |
| 0,463      | 5,68            | 661             | 6,1               | 93,11                 |
| 0,458      | 5,62            | 656,2           | 6,06              | 92,74                 |
| 0,469      | 5,76            | 663,3           | 6,12              | 94,12                 |
| 0,467      | 5,73            | 652,6           | 6,02              | 95,12                 |
| 0,472      | 5,8             | 653,4           | 6,03              | 96,19                 |
| 0,471      | 5,78            | 659,5           | 6,09              | 94,91                 |
| 0,466      | 5,72            | 657,8           | 6,07              | 94,2                  |
| 0,459      | 5,63            | 654,8           | 6,04              | 93,21                 |
|            |                 |                 | X                 | 94,50                 |
|            |                 |                 | SD                | 1,29                  |
|            |                 |                 | KV                | 1,37                  |

Hasil Uji Keragaman Kandungan Tablet Formula C *Batch II*

| <b>Abs</b> | <b>C sampel</b> | <b>W sampel</b> | <b>C teoritis</b> | <b>Kadar (persen)</b> |
|------------|-----------------|-----------------|-------------------|-----------------------|
| 0,462      | 5,67            | 643,6           | 5,94              | 95,45                 |
| 0,458      | 5,62            | 641,7           | 5,92              | 94,93                 |
| 0,471      | 5,78            | 641,1           | 5,92              | 97,64                 |
| 0,451      | 5,53            | 639,5           | 5,9               | 93,73                 |
| 0,456      | 5,59            | 642             | 5,93              | 94,27                 |
| 0,447      | 5,48            | 635,6           | 5,87              | 93,36                 |
| 0,473      | 5,81            | 644,1           | 5,95              | 97,65                 |
| 0,468      | 5,75            | 643             | 5,94              | 96,8                  |
| 0,459      | 5,63            | 645,7           | 5,96              | 94,46                 |
| 0,466      | 5,72            | 641,3           | 5,92              | 966,62                |
|            |                 |                 | X                 | 95,49                 |
|            |                 |                 | SD                | 1,59                  |
|            |                 |                 | KV                | 1,67                  |

Hasil Uji Keragaman Kandungan Tablet Formula C *Batch* III

| <b>Abs</b> | <b>C sampel</b> | <b>W sampel</b> | <b>C teoritis</b> | <b>Kadar (persen)</b> |
|------------|-----------------|-----------------|-------------------|-----------------------|
| 0,478      | 5,87            | 649,4           | 5,99              | 97,99                 |
| 0,438      | 5,36            | 635,1           | 5,86              | 91,46                 |
| 0,447      | 5,48            | 629,5           | 5,81              | 94,32                 |
| 0,47       | 5,77            | 645,8           | 5,96              | 96,81                 |
| 0,457      | 5,6             | 644,4           | 5,95              | 94,12                 |
| 0,468      | 5,75            | 647,1           | 5,97              | 96,31                 |
| 0,459      | 5,63            | 644,3           | 5,95              | 94,62                 |
| 0,465      | 5,71            | 648             | 5,98              | 95,48                 |
| 0,47       | 5,77            | 651,3           | 6,01              | 96,01                 |
| 0,475      | 5,84            | 652,9           | 6,03              | 96,85                 |
|            |                 |                 | X                 | 95,40                 |
|            |                 |                 | SD                | 1,85                  |
|            |                 |                 | KV                | 1,94                  |

Hasil Uji Keragaman Kandungan Tablet Formula D *Batch* I

| <b>Abs</b> | <b>C sampel</b> | <b>W sampel</b> | <b>C teoritis</b> | <b>Kadar (persen)</b> |
|------------|-----------------|-----------------|-------------------|-----------------------|
| 0,482      | 5,92            | 659             | 6,01              | 98,5                  |
| 0,461      | 5,66            | 667             | 6,16              | 91,9                  |
| 0,482      | 5,92            | 657,4           | 6,07              | 97,53                 |
| 0,51       | 6,28            | 653,8           | 6,04              | 103,97                |
| 0,437      | 5,35            | 651,6           | 6,01              | 89,02                 |
| 0,466      | 5,72            | 663,8           | 6,13              | 93,31                 |
| 0,451      | 5,53            | 661,5           | 6,11              | 90,51                 |
| 0,459      | 5,63            | 659             | 6,08              | 92,6                  |
| 0,479      | 5,89            | 654,6           | 6,04              | 97,52                 |
| 0,472      | 5,80            | 653,8           | 6,04              | 96,03                 |
|            |                 |                 | X                 | 95,09                 |
|            |                 |                 | SD                | 4,48                  |
|            |                 |                 | KV                | 4,71                  |



Hasil Uji Keragaman Kandungan Tablet Formula D *Batch* II

| <b>Abs</b> | <b>C sampel</b> | <b>W sampel</b> | <b>C teoritis</b> | <b>Kadar (persen)</b> |
|------------|-----------------|-----------------|-------------------|-----------------------|
| 0,472      | 5,8             | 665,6           | 6,14              | 94,46                 |
| 0,453      | 5,55            | 651,6           | 6,01              | 92,35                 |
| 0,48       | 5,9             | 663,7           | 6,13              | 96,2                  |
| 0,478      | 5,55            | 656,7           | 6,06              | 91,58                 |
| 0,463      | 5,68            | 653,7           | 6,03              | 94,19                 |
| 0,473      | 5,81            | 654,1           | 6,04              | 96,19                 |
| 0,444      | 5,44            | 653,9           | 6,04              | 90,07                 |
| 0,45       | 5,51            | 658,8           | 6,08              | 90,63                 |
| 0,478      | 5,87            | 661,3           | 6,1               | 96,23                 |
| 0,468      | 5,75            | 655,8           | 6,05              | 95,04                 |
|            |                 |                 | X                 | 93,69                 |
|            |                 |                 | SD                | 2,37                  |
|            |                 |                 | KV                | 2,53                  |

Hasil Uji Keragaman Kandungan Tablet Formula D *Batch* III

| <b>Abs</b> | <b>C sampel</b> | <b>W sampel</b> | <b>C teoritis</b> | <b>Kadar (persen)</b> |
|------------|-----------------|-----------------|-------------------|-----------------------|
| 0,461      | 6,66            | 654,6           | 6,04              | 93,71                 |
| 0,458      | 5,62            | 649,1           | 5,99              | 93,82                 |
| 0,474      | 5,82            | 653,8           | 6,04              | 96,36                 |
| 0,467      | 5,73            | 655,2           | 6,05              | 94,71                 |
| 0,481      | 5,91            | 653,8           | 6,04              | 97,85                 |
| 0,475      | 5,84            | 655,7           | 6,05              | 96,53                 |
| 0,459      | 5,63            | 653,6           | 6,03              | 93,37                 |
| 0,468      | 5,75            | 654             | 6,04              | 95,2                  |
| 0,471      | 5,78            | 658,2           | 6,08              | 95,07                 |
| 0,476      | 5,85            | 656             | 6,06              | 96,53                 |
|            |                 |                 | X                 | 95,32                 |
|            |                 |                 | SD                | 1,49                  |
|            |                 |                 | KV                | 1,57                  |



**LAMPIRAN H**  
**HASIL PENETAPAN KADAR TABLET LIKUISOLID PIROKSIKAM**

*Batch I*

| Formula | Replikasi | Absorbansi | Csampil<br>( $\mu\text{g/ml}$ ) | Cteoritis<br>( $\mu\text{g/ml}$ ) | Kadar<br>(%) | $\bar{x} \pm \text{SD}$ | SD rel<br>(%) |
|---------|-----------|------------|---------------------------------|-----------------------------------|--------------|-------------------------|---------------|
| A       | 1         | 0,458      | 5,62                            | 5,85                              | 96,12        | 96,91 $\pm$ 0,72        | 0,74          |
|         | 2         | 0,474      | 5,82                            | 6,00                              | 97,09        |                         |               |
|         | 3         | 0,480      | 5,90                            | 6,05                              | 97,53        |                         |               |
| B       | 1         | 0,515      | 6,35                            | 6,16                              | 103,08       | 100,04 $\pm$ 2,64       | 2,63          |
|         | 2         | 0,489      | 6,01                            | 6,10                              | 98,52        |                         |               |
|         | 3         | 0,483      | 5,94                            | 6,03                              | 98,51        |                         |               |
| C       | 1         | 0,472      | 5,8                             | 6,00                              | 96,97        | 95,99 $\pm$ 0,79        | 0,83          |
|         | 2         | 0,467      | 5,73                            | 6,02                              | 95,12        |                         |               |
|         | 3         | 0,472      | 5,8                             | 6,03                              | 96,19        |                         |               |
| D       | 1         | 0,482      | 5,92                            | 6,01                              | 98,50        | 100,00 $\pm$ 3,47       | 3,47          |
|         | 2         | 0,482      | 5,92                            | 6,07                              | 97,53        |                         |               |
|         | 3         | 0,510      | 6,28                            | 6,04                              | 103,97       |                         |               |

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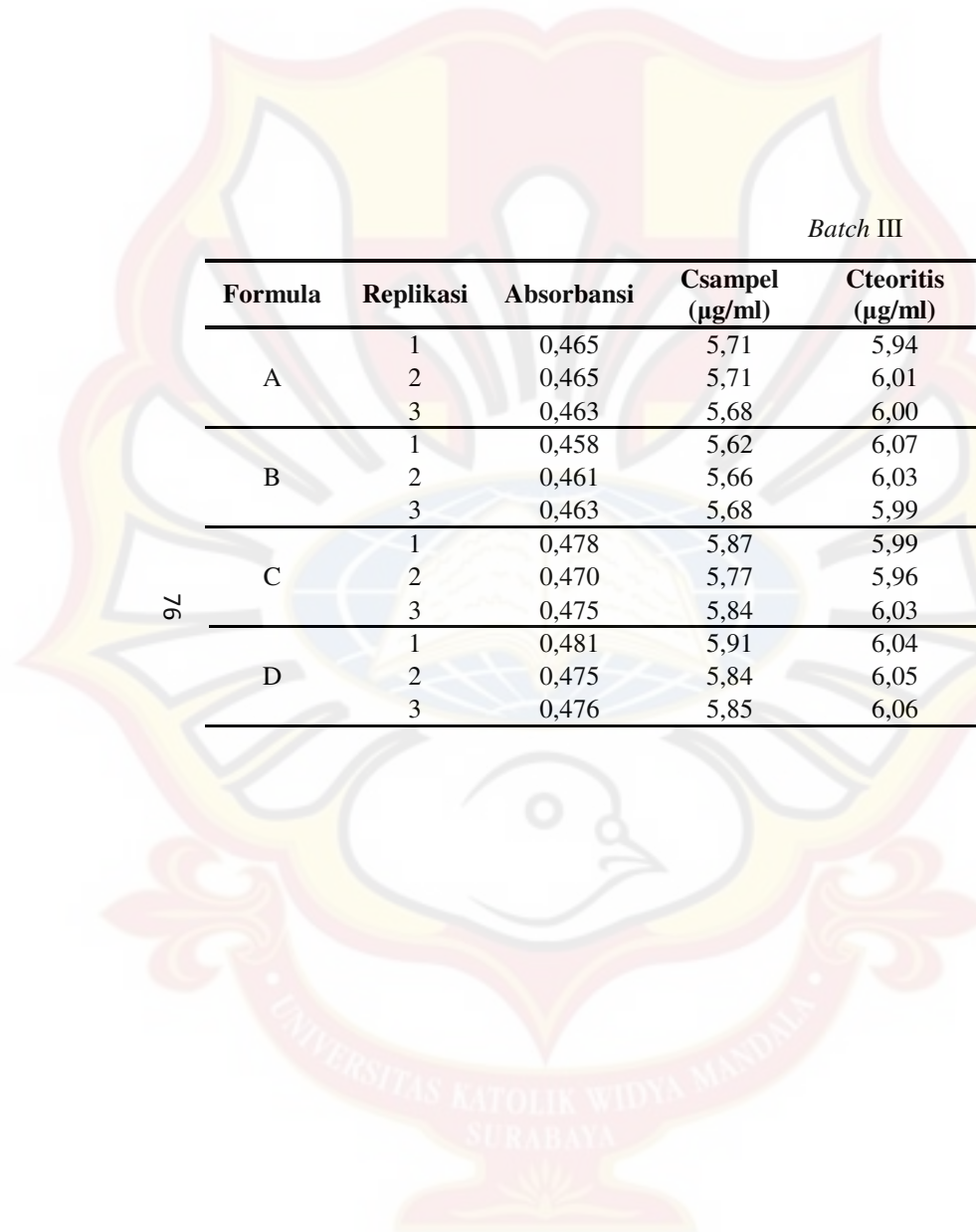
Batch II

| Formula | Replikasi | Absorbansi | Csampil (µg/ml) | Cteoritis (µg/ml) | Kadar (%) | $\bar{X} \pm SD$ | SD rel (%) |
|---------|-----------|------------|-----------------|-------------------|-----------|------------------|------------|
| A       | 1         | 0,458      | 5,62            | 5,97              | 94,06     | 94,41±0,50       | 0,53       |
|         | 2         | 0,454      | 5,57            | 5,91              | 94,18     |                  |            |
|         | 3         | 0,461      | 5,66            | 5,96              | 94,98     |                  |            |
| B       | 1         | 0,479      | 5,89            | 6,13              | 96,08     | 95,97±0,10       | 0,10       |
|         | 2         | 0,478      | 5,87            | 6,12              | 95,92     |                  |            |
|         | 3         | 0,477      | 5,86            | 6,11              | 95,91     |                  |            |
| C       | 1         | 0,471      | 5,78            | 5,92              | 97,64     | 97,36±0,49       | 0,50       |
|         | 2         | 0,473      | 5,81            | 5,95              | 97,65     |                  |            |
|         | 3         | 0,468      | 5,75            | 5,94              | 96,80     |                  |            |
| D       | 1         | 0,480      | 5,90            | 6,13              | 96,20     | 96,21±0,02       | 0,02       |
|         | 2         | 0,473      | 5,81            | 6,04              | 96,19     |                  |            |
|         | 3         | 0,478      | 5,87            | 6,10              | 96,23     |                  |            |

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Batch III

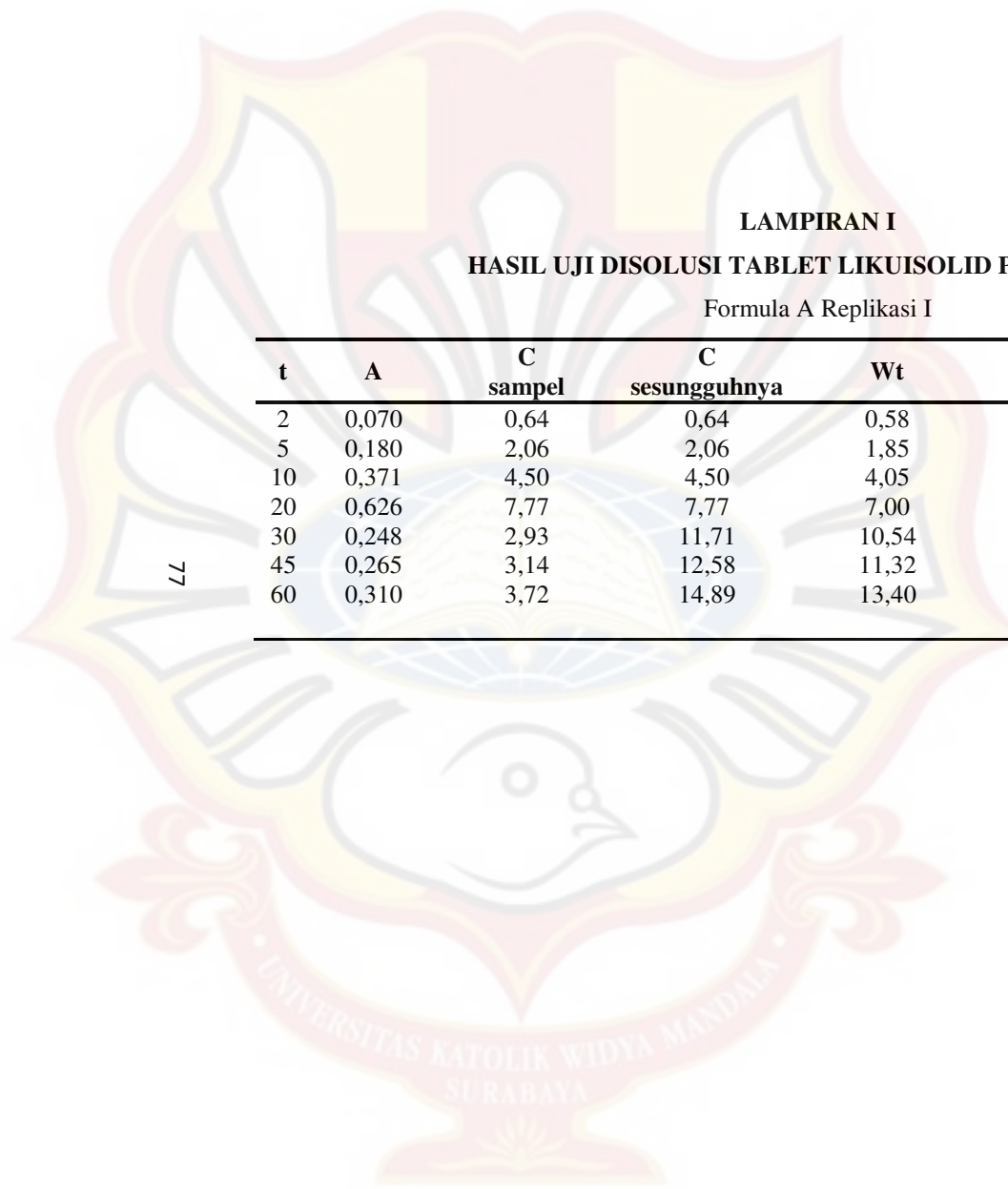
| Formula | Replikasi | Absorbansi | Csampel (µg/ml) | Cteoritis (µg/ml) | Kadar (%) | $\bar{X} \pm SD$ | SD rel (%) |
|---------|-----------|------------|-----------------|-------------------|-----------|------------------|------------|
| A       | 1         | 0,465      | 5,71            | 5,94              | 96,14     | 95,28±0,75       | 0,79       |
|         | 2         | 0,465      | 5,71            | 6,01              | 94,95     |                  |            |
|         | 3         | 0,463      | 5,68            | 6,00              | 94,75     |                  |            |
| B       | 1         | 0,458      | 5,62            | 6,07              | 92,55     | 93,74±1,14       | 1,22       |
|         | 2         | 0,461      | 5,66            | 6,03              | 93,86     |                  |            |
|         | 3         | 0,463      | 5,68            | 5,99              | 94,82     |                  |            |
| C       | 1         | 0,478      | 5,87            | 5,99              | 97,99     | 97,22±0,67       | 0,69       |
|         | 2         | 0,470      | 5,77            | 5,96              | 96,81     |                  |            |
|         | 3         | 0,475      | 5,84            | 6,03              | 96,85     |                  |            |
| D       | 1         | 0,481      | 5,91            | 6,04              | 97,85     | 96,97±0,76       | 0,79       |
|         | 2         | 0,475      | 5,84            | 6,05              | 96,53     |                  |            |
|         | 3         | 0,476      | 5,85            | 6,06              | 96,53     |                  |            |



**LAMPIRAN I**  
**HASIL UJI DISOLUSI TABLET LIKUISOLID PIROKSIKAM**  
 Formula A Replikasi I

| <b>t</b> | <b>A</b> | <b>C sampel</b> | <b>C sesungguhnya</b> | <b>Wt</b> | <b>% obat terlarut</b> | <b>AUC</b> |
|----------|----------|-----------------|-----------------------|-----------|------------------------|------------|
| 2        | 0,070    | 0,64            | 0,64                  | 0,58      | 2,99                   | 0,58       |
| 5        | 0,180    | 2,06            | 2,06                  | 1,85      | 9,54                   | 3,645      |
| 10       | 0,371    | 4,50            | 4,50                  | 4,05      | 20,91                  | 14,75      |
| 20       | 0,626    | 7,77            | 7,77                  | 7,00      | 36,09                  | 55,25      |
| 30       | 0,248    | 2,93            | 11,71                 | 10,54     | 54,36                  | 87,7       |
| 45       | 0,265    | 3,14            | 12,58                 | 11,32     | 58,41                  | 163,95     |
| 60       | 0,310    | 3,72            | 14,89                 | 13,40     | 69,13                  | 185,4      |
|          |          |                 |                       |           |                        | 511,275    |

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Formula A Replikasi II

| <b>t</b> | <b>A</b> | <b>C sampel</b> | <b>C sesungguhnya</b> | <b>Wt</b> | <b>% obat terlarut</b> | <b>AUC</b> |
|----------|----------|-----------------|-----------------------|-----------|------------------------|------------|
| 2        | 0,056    | 0,47            | 0,47                  | 0,42      | 2,22                   | 0,42       |
| 5        | 0,230    | 2,70            | 2,70                  | 2,43      | 12,85                  | 4,275      |
| 10       | 0,263    | 3,12            | 3,12                  | 2,81      | 14,87                  | 13,1       |
| 20       | 0,745    | 9,30            | 9,30                  | 8,37      | 44,32                  | 55,9       |
| 30       | 0,301    | 3,61            | 12,02                 | 10,82     | 57,29                  | 95,95      |
| 45       | 0,328    | 3,95            | 15,81                 | 14,23     | 75,36                  | 187,875    |
| 60       | 0,354    | 4,29            | 17,14                 | 15,43     | 81,71                  | 222,45     |
|          |          |                 |                       |           |                        | 579,97     |

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Formula A Replikasi III

| <b>t</b> | <b>A</b> | <b>C sampel</b> | <b>C sesungguhnya</b> | <b>Wt</b> | <b>% obat terlarut</b> | <b>AUC</b> |
|----------|----------|-----------------|-----------------------|-----------|------------------------|------------|
| 2        | 0,054    | 0,44            | 0,44                  | 0,40      | 2,08                   | 0,4        |
| 5        | 0,241    | 2,84            | 2,84                  | 2,55      | 13,40                  | 4,425      |
| 10       | 0,298    | 3,57            | 3,57                  | 3,21      | 16,85                  | 14,4       |
| 20       | 0,673    | 8,38            | 8,38                  | 7,54      | 39,56                  | 53,75      |
| 30       | 0,257    | 3,04            | 12,17                 | 10,95     | 57,47                  | 92,45      |
| 45       | 0,295    | 3,53            | 14,12                 | 12,71     | 66,68                  | 177,45     |
| 60       | 0,354    | 4,29            | 17,14                 | 15,43     | 81,71                  | 222,45     |
|          |          |                 |                       |           |                        | 579,97     |

## HASIL UJI DISOLUSI TABLET LIKUISOLID PIROKSIKAM

### Formula B Replikasi I

| <b>t</b> | <b>A</b> | <b>C sampel</b> | <b>C sesungguhnya</b> | <b>Wt</b> | <b>% obat terlarut</b> | <b>AUC</b> |
|----------|----------|-----------------|-----------------------|-----------|------------------------|------------|
| 2        | 0,072    | 0,67            | 0,67                  | 0,60      |                        | 0,60       |
| 5        | 0,245    | 2,89            | 2,89                  | 2,60      | 12,99                  | 4,80       |
| 10       | 0,289    | 3,45            | 3,45                  | 3,11      | 15,53                  | 14,27      |
| 20       | 0,760    | 9,49            | 9,49                  | 8,54      | 42,69                  | 58,25      |
| 30       | 0,301    | 3,61            | 14,43                 | 12,98     | 64,89                  | 107,6      |
| 45       | 0,349    | 4,22            | 16,89                 | 15,20     | 75,96                  | 211,35     |
| 60       | 0,387    | 4,71            | 18,84                 | 16,95     | 84,73                  | 241.12     |
|          |          |                 |                       |           |                        | 638,00     |

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### Formula B Replikasi II

| <b>t</b> | <b>A</b> | <b>C sampel</b> | <b>C sesungguhnya</b> | <b>Wt</b> | <b>% obat terlarut</b> | <b>AUC</b> |
|----------|----------|-----------------|-----------------------|-----------|------------------------|------------|
| 2        | 0,067    | 0,61            | 0,61                  | 0,55      | 2,84                   | 0,55       |
| 5        | 0,210    | 2,44            | 2,44                  | 2,20      | 11,44                  | 4,12       |
| 10       | 0,240    | 2,82            | 2,82                  | 2,54      | 13,24                  | 11,85      |
| 20       | 0,680    | 8,47            | 8,47                  | 7,62      | 39,69                  | 50,80      |
| 30       | 0,310    | 3,72            | 14,89                 | 13,40     | 69,81                  | 105,10     |
| 45       | 0,330    | 3,98            | 15,91                 | 14,32     | 74,61                  | 207,90     |
| 60       | 0,369    | 4,48            | 17,91                 | 16,12     | 83,99                  | 228,31     |
|          |          |                 |                       |           |                        | 608,64     |



Formula B Replikasi III

| <b>t</b> | <b>A</b> | <b>C sampel</b> | <b>C sesungguhnya</b> | <b>Wt</b> | <b>% obat terlarut</b> | <b>AUC</b> |
|----------|----------|-----------------|-----------------------|-----------|------------------------|------------|
| 2        | 0,058    | 0,49            | 0,49                  | 0,44      | 2,36                   | 0,44       |
| 5        | 0,200    | 2,31            | 2,31                  | 2,08      | 11,10                  | 3,78       |
| 10       | 0,237    | 2,79            | 2,79                  | 2,51      | 13,37                  | 11,47      |
| 20       | 0,647    | 8,04            | 8,04                  | 7,24      | 38,61                  | 48,75      |
| 30       | 0,352    | 4,26            | 17,04                 | 15,34     | 81,81                  | 112,9      |
| 45       | 0,354    | 4,29            | 17,14                 | 15,43     | 82,30                  | 230,77     |
| 60       | 0,378    | 4,59            | 18,37                 | 16,54     | 88,21                  | 239,77     |
|          |          |                 |                       |           |                        | 647,89     |

## HASIL UJI DISOLUSI TABLET LIKUISOLID PIROKSIKAM

### Formula C Replikasi I

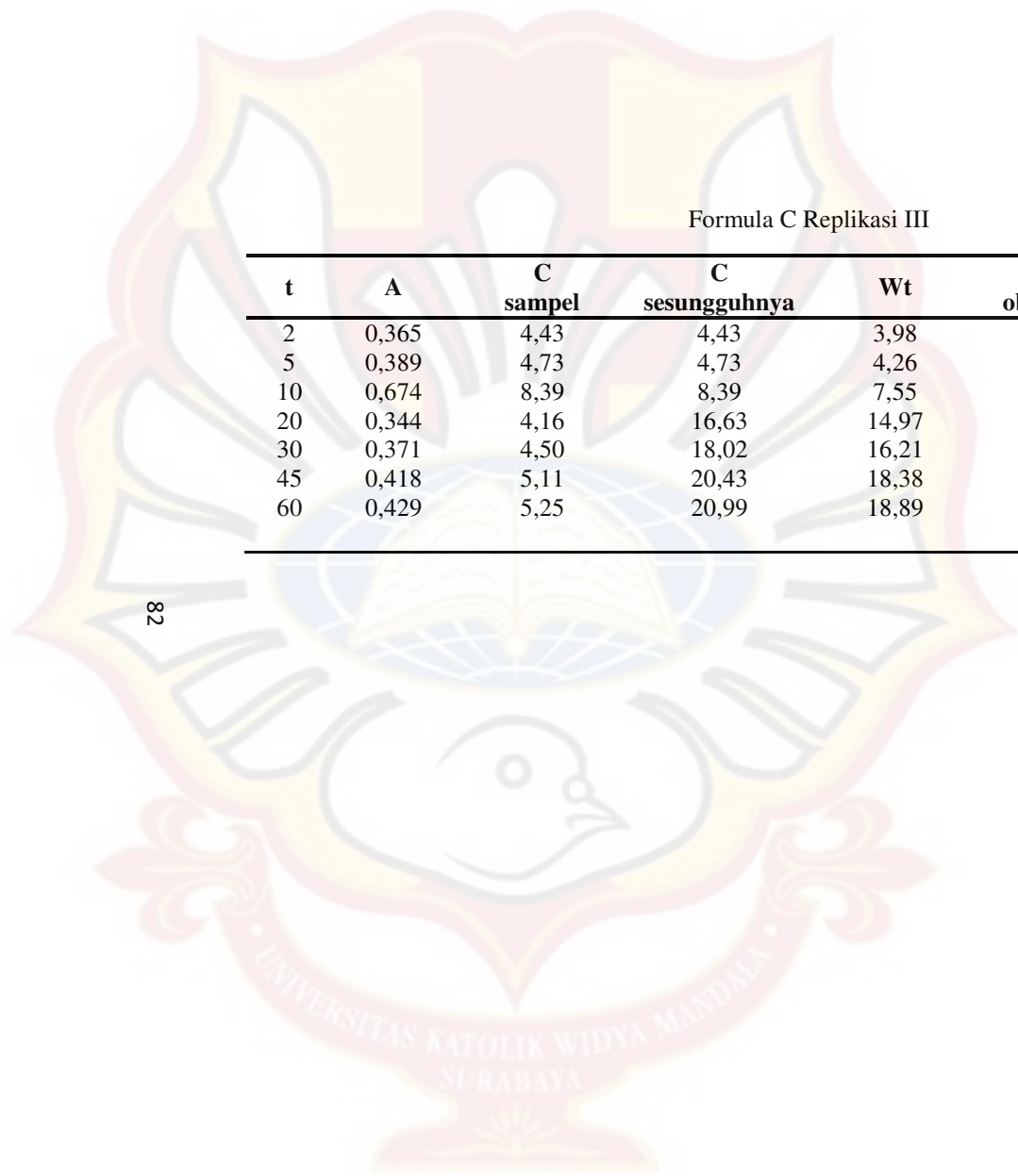
| <b>t</b> | <b>A</b> | <b>C sampel</b> | <b>C sesungguhnya</b> | <b>Wt</b> | <b>% obat terlarut obat</b> | <b>AUC</b> |
|----------|----------|-----------------|-----------------------|-----------|-----------------------------|------------|
| 2        | 0,252    | 2,98            | 2,98                  | 2,68      | 13,96                       | 2,68       |
| 5        | 0,546    | 6,75            | 6,75                  | 6,07      | 31,63                       | 13,12      |
| 10       | 0,693    | 8,63            | 8,63                  | 7,77      | 40,47                       | 34,60      |
| 20       | 0,327    | 3,94            | 15,76                 | 14,18     | 73,88                       | 109,75     |
| 30       | 0,376    | 4,57            | 18,27                 | 16,44     | 85,66                       | 153,10     |
| 45       | 0,404    | 4,93            | 19,71                 | 17,74     | 92,39                       | 256,35     |
| 60       | 0,423    | 5,17            | 20,68                 | 18,61     | 96,96                       | 272,62     |
|          |          |                 |                       |           |                             | 842,23     |

### Formula C Replikasi II

| <b>t</b> | <b>A</b> | <b>C sampel</b> | <b>C sesungguhnya</b> | <b>Wt</b> | <b>% obat terlarut obat</b> | <b>AUC</b> |
|----------|----------|-----------------|-----------------------|-----------|-----------------------------|------------|
| 2        | 0,313    | 3,76            | 3,76                  | 3,38      | 17,38                       | 3,38       |
| 5        | 0,432    | 5,29            | 5,29                  | 4,76      | 24,43                       | 12,21      |
| 10       | 0,681    | 8,48            | 8,48                  | 7,63      | 39,19                       | 30,97      |
| 20       | 0,351    | 4,25            | 16,99                 | 15,29     | 78,53                       | 114,60     |
| 30       | 0,378    | 4,59            | 18,37                 | 16,54     | 84,93                       | 159,15     |
| 45       | 0,423    | 5,17            | 20,68                 | 18,61     | 95,59                       | 263,625    |
| 60       | 0,431    | 5,27            | 21,09                 | 18,98     | 97,49                       | 281,925    |
|          |          |                 |                       |           |                             | 865,86     |

Formula C Replikasi III

| <b>t</b> | <b>A</b> | <b>C sampel</b> | <b>C sesungguhnya</b> | <b>Wt</b> | <b>% obat terlarut obat</b> | <b>AUC</b> |
|----------|----------|-----------------|-----------------------|-----------|-----------------------------|------------|
| 2        | 0,365    | 4,43            | 4,43                  | 3,98      | 20,49                       | 3,98       |
| 5        | 0,389    | 4,73            | 4,73                  | 4,26      | 21,92                       | 12,36      |
| 10       | 0,674    | 8,39            | 8,39                  | 7,55      | 38,83                       | 29,52      |
| 20       | 0,344    | 4,16            | 16,63                 | 14,97     | 76,98                       | 112,6      |
| 30       | 0,371    | 4,50            | 18,02                 | 16,21     | 83,39                       | 155,9      |
| 45       | 0,418    | 5,11            | 20,43                 | 18,38     | 94,54                       | 259,42     |
| 60       | 0,429    | 5,25            | 20,99                 | 18,89     | 97,15                       | 279,52     |
|          |          |                 |                       |           |                             | 853,31     |



## HASIL UJI DISOLUSI TABLET LIKUISOLID PIROKSIKAM

### Formula D Replikasi I

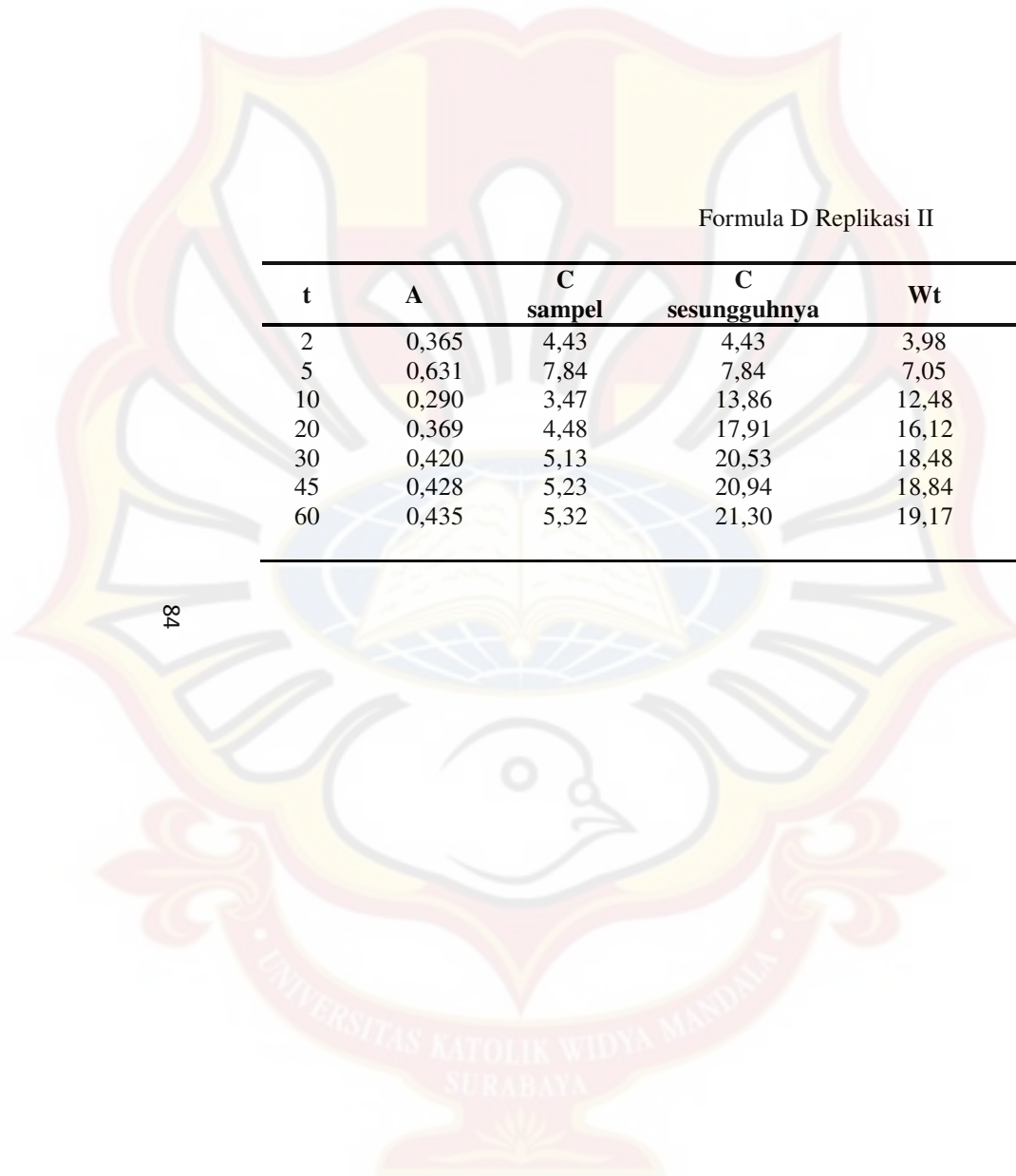
| <b>t</b> | <b>A</b> | <b>C sampel</b> | <b>C sesungguhnya</b> | <b>Wt</b> | <b>% obat terlarut</b> | <b>AUC</b> |
|----------|----------|-----------------|-----------------------|-----------|------------------------|------------|
| 2        | 0,354    | 4,29            | 4,29                  | 3,86      | 19,29                  | 3,86       |
| 5        | 0,641    | 7,97            | 7,97                  | 7,17      | 35,84                  | 16,54      |
| 10       | 0,297    | 3,56            | 14,22                 | 12,80     | 63,99                  | 49,92      |
| 20       | 0,367    | 4,45            | 17,81                 | 16,03     | 80,15                  | 144,15     |
| 30       | 0,408    | 4,98            | 19,91                 | 17,92     | 89,61                  | 169,75     |
| 45       | 0,429    | 5,25            | 20,99                 | 18,89     | 94,45                  | 276,07     |
| 60       | 0,441    | 5,40            | 21,61                 | 19,44     | 97,22                  | 287,47     |
|          |          |                 |                       |           |                        | 947,78     |

### Formula D Replikasi II

| <b>t</b> | <b>A</b> | <b>C sampel</b> | <b>C sesungguhnya</b> | <b>Wt</b> | <b>% obat terlarut</b> | <b>AUC</b> |
|----------|----------|-----------------|-----------------------|-----------|------------------------|------------|
| 2        | 0,300    | 3,59            | 3,59                  | 3,23      | 16,81                  | 3,23       |
| 5        | 0,615    | 7,63            | 7,63                  | 6,87      | 35,70                  | 15,15      |
| 10       | 0,289    | 3,45            | 13,81                 | 12,43     | 64,59                  | 48,25      |
| 20       | 0,371    | 4,50            | 18,02                 | 16,21     | 84,26                  | 143,20     |
| 30       | 0,417    | 5,09            | 20,37                 | 18,34     | 95,30                  | 172,75     |
| 45       | 0,424    | 5,18            | 20,73                 | 18,66     | 96,98                  | 277,50     |
| 60       | 0,432    | 5,29            | 21,14                 | 19,03     | 98,89                  | 282,67     |
|          |          |                 |                       |           |                        | 942,75     |

Formula D Replikasi II

| <b>t</b> | <b>A</b> | <b>C sampel</b> | <b>C sesungguhnya</b> | <b>Wt</b> | <b>% obat terlarut</b> | <b>AUC</b> |
|----------|----------|-----------------|-----------------------|-----------|------------------------|------------|
| 2        | 0,365    | 4,43            | 4,43                  | 3,98      | 20,54                  | 3,98       |
| 5        | 0,631    | 7,84            | 7,84                  | 7,05      | 36,37                  | 16,54      |
| 10       | 0,290    | 3,47            | 13,86                 | 12,48     | 64,33                  | 48,82      |
| 20       | 0,369    | 4,48            | 17,91                 | 16,12     | 83,13                  | 143,00     |
| 30       | 0,420    | 5,13            | 20,53                 | 18,48     | 95,26                  | 173,00     |
| 45       | 0,428    | 5,23            | 20,94                 | 18,84     | 97,17                  | 279,90     |
| 60       | 0,435    | 5,32            | 21,30                 | 19,17     | 98,83                  | 285,07     |
|          |          |                 |                       |           |                        | 950,32     |



**LAMPIRAN J**  
**CONTOH PERHITUNGAN**

**Contoh perhitungan sudut diam:**

Formula A:

$$W \text{ persegi panjang} = 1,8119 \text{ gram}$$

$$W \text{ lingkaran} = 0,556 \text{ gram}$$

$$\text{Luas persegi panjang} = 360,96 \text{ cm}^2$$

$$\text{Luas lingkaran} = \frac{0,556}{1,8119} \times 360,96 = 109,63 \text{ cm}^2$$

$$L = \pi \cdot r^2$$

$$r^2 = \frac{L}{\pi}$$

$$= \frac{109,63}{3,1}$$

$$r = 5,9 \text{ cm}$$

$$\text{tg } \alpha = \frac{t}{r} = \frac{2,525}{5,9}$$

$$= 23,17^\circ$$



**Contoh perhitungan indeks kompresibilitas:**

Formula A :

Berat gelas = 126,29 g ( $W_1$ )

Berat gelas + granul = 168,70 g ( $W_2$ )

$V_1 = 100$  ml

$V_2 = 85$  m

$$Bj \text{ nyata} = \frac{(W_2 - W_1)}{V_1} = \frac{168,70 - 126,29}{100} = 0,4241$$

$$Bj \text{ mampat} = \frac{(W_2 - W_1)}{V_2} = \frac{(168,70 - 126,29)}{85} = 0,4989$$

$$\% \text{ kompresibilitas} = \left( 1 - \frac{Bj.nyata}{Bj.mampat} \right) \times 100\% = 15,0\%$$

**Contoh perhitungan akurasi & presisi:**

| %   | Bahan aktif (mg) | PG | Matriks (mg) | HCl 0,1 N ad | Pipet | HCL 0,1 N ad | Konsentrasi (ppm) |
|-----|------------------|----|--------------|--------------|-------|--------------|-------------------|
| 100 | 20               | 47 | 583          | 500          | 1,5   | 10           | 6                 |

$$\text{Absorbansi} = 0,459 \rightarrow y = 0,078x + 0,0197$$

Konsentrasi sebenarnya = 5,63 ppm

Konsentrasi teoritis = 6,03 ppm

$$\begin{aligned} \% \text{ perolehan kembali} &= (\text{konsentrasi sebenarnya} / \text{konsentrasi teoritis}) \times \\ &100\% \\ &= (5,62 / 6,03) \times 100\% \\ &= 93,40\% \end{aligned}$$

$$\begin{aligned} \text{Untuk menghitung \% KV} &= \frac{SD}{\bar{X}} \times 100\% \\ &= \frac{1,6189}{99,47} \times 100\% \\ &= 1,6275 \% \end{aligned}$$

#### Contoh perhitungan % obat terlepas:

$$\% \text{ obat terlepas} = \frac{Wt}{\frac{PK}{100} \times \text{dosis}} \times 100\%$$

Formula A replikasi 1 pada t = 5 menit

$$\% \text{ obat terlepas} = \frac{1,85}{\frac{96,91}{100} \times 20} \times 100\% = 9,54\%$$

#### Contoh perhitungan AUC pada disolusi:

$$\text{Rumus: } \frac{W_m + W_{m-1}}{2} \times (t_n - t_{n-1})$$

Formula A replikasi 1

$$W_{t_{n-1}} = 0,58$$

$$W_{t_n} = 1,85$$

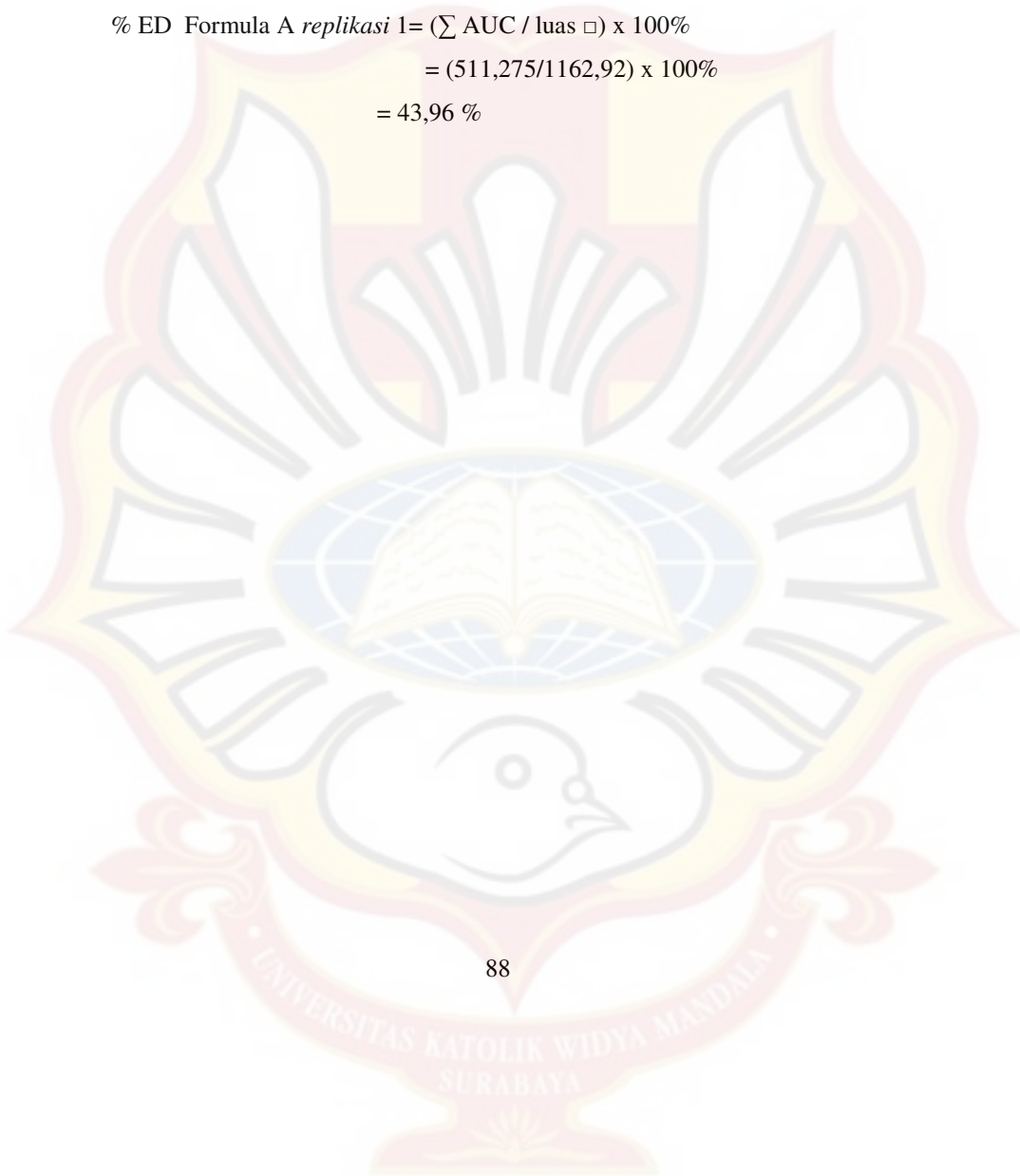
$$t_n = 5 \text{ menit}$$

$$t_{n-1} = 3 \text{ menit}$$

$$\begin{aligned} \text{AUC} &= \frac{1,85 + 0,58}{2} \times (5 - 2) \\ &= 3,645 \end{aligned}$$

$$\begin{aligned} \text{Luas } \square &= 60 \times \text{penetapan kadar} \times \text{dosis} \\ &= 60 \times 96,91\% \times 20 \text{ mg} \\ &= 1162,92 \end{aligned}$$

$$\begin{aligned} \% \text{ ED Formula A replikasi 1} &= (\sum \text{AUC} / \text{luas } \square) \times 100\% \\ &= (511,275 / 1162,92) \times 100\% \\ &= 43,96 \% \end{aligned}$$



**LAMPIRAN K**  
**SERTIFIKAT ANALISIS PIROKSIKAM**

南通精华制药股份有限公司检验报告

NANTONG JINGHUA PHARMACEUTICAL CO. LTD.

CERTIFICATE OF ANALYSIS

APIs: ADD: 43 Yaogang Road, Nantong, Jiangsu China  
Tel: 86-513-85609405/85609406

17/3 '09 PD 11SD = 25 kg


吡罗昔康

**PIROXICAM**                      MICRONIZED

|                     |             |                  |          |
|---------------------|-------------|------------------|----------|
| Batch No.           | PRX2009005M | Manufacture Date | 2009.3.4 |
| Total Quantity      | 200.0KG     | Report Date      | 2009.3.5 |
| Commercial Quantity | 200.0KG     | Re-test Date     | 2012.3.3 |
| Inspection No.      | 09030020    |                  |          |

| TEST                        | SPECIFICATIONS<br>(USP)                                | RESULTS  |
|-----------------------------|--|----------|
| Characteristics             | off-white to light tan or light yellow odorless powder | Complies |
| Identification              | A. IR B. UV C. TLC                                     | Complies |
| Water                       | ≤0.5%  | 0.32%    |
| Residue on ignition         | ≤0.3%  | 0.14%    |
| Heavy metals                | ≤0.005%  | <0.005%  |
| Organic volatile impurities | complies   | Complies |
| Residual solvents           | Ethanol ≤0.5%  | <0.5%    |
| Particle size               | 100% ≤ 1000 mesh                                       | Complies |
| Assay                       | 97.0-103.0%  | 99.46%   |

Conclusion: The product meets the requirements of USP 31 and the additional items defined by customer

|  |   |  |
|--|---|--|
| Analyst:  | Supervisor:  | Chief of Laboratory:  |
|  |   | QA Release Date:      |



# Sertifikat Analisis Avicel PH 102

**ASAHI KASEI CHEMICALS CORPORATION**

Date: 28-AUG-2009

Issued by manufacturer

1-105 Kanda Jinbocho, Chiyoda-ku, TOKYO 101-8101, JAPAN  
 TEL. +81-(0)3-3296-3381 FAX. +81-(0)3-3296-3467  
 Manufacturing site: 304, Mizuishi-machi, Noboroka-city, Miyazaki 882-0015, Japan

YOUR NO.: BYUE-09-5298-0078

109/13.13/1/10

## CERTIFICATE OF ANALYSIS

Compendial name: Microcrystalline Cellulose, NF, Ph. Eur., JP

Trade name : CEOLUS®

Grade : PH-102

Lot No. 2965 (183bags)

Manufacturing Date: 24-JUN-2009

Re-evaluation Date: 24-JUN-2012

Organic Solvent: not used in our process

| Compendial Standards                          | Specifications | Lot Analysis |
|---|----------------|--------------|
| Description                                   | Passes         | Passes       |
| Identification                                | Passes         | Passes       |
| Degree of polymerization                      | 100 - 300      | Passes       |
| Loss on drying (%)                            | 2.0 - 5.0      | 3.5          |
| Water-soluble substances (mg)                 | NMT 12.5       | 5.6          |
| Ether-soluble substances (mg)                 | NMT 5.0        | 1.1          |
| Conductivity (μ S/cm)                         | NMT 75         | 26           |
| Heavy metals (ppm)                            | NMT 10         | NMT 10       |
| Solubility                                    | Passes         | Passes       |
| Residue on ignition (%)                       | NMT 0.1        | 0.02         |
| Bulk density (g/cm <sup>3</sup> )             | 0.28 - 0.33    | 0.316        |
| pH  | 5.0 - 7.5      | 6.1          |
| Total aerobic microbial count (cfu/g)         | NMT 1000       | Passes       |
| Total combined molds and yeasts count (cfu/g) | NMT 100        | Passes       |
| <i>Escherichia coli</i>                       | None Present   | None Present |
| <i>Salmonella</i> species                     | None Present   | None Present |
| <i>Pseudomonas Aeruginosa</i>                 | None Present   | None Present |
| <i>Staphylococcus Aureus</i>                  | None Present   | None Present |
| <b>ASAHI Standards</b>                        |                |              |
| Particle size, wt. % >250 μ m (60 mesh)       | LT 8.0         | 0.3          |
| Particle size, wt. % >150 μ m (100 mesh)      | 20 - 40        | 29           |


NMT --Not More Than; LT --Less Than

We certify that the product complies with the standards of the NF, Ph. Eur., JP.

**Storage conditions:** Store at ambient conditions. Keep containers sealed; material is hygroscopic.

**Re-evaluation Date:** Three years after manufacturing, if stored as recommended.

Asahi Kasei Chemicals recommends that the customer's quality control unit may re-evaluate the quality of this material at the given time e.g. for loss on drying and extend the shelf life of this batch on its own responsibility.

  
 Shuji OKISHI  
 Manager  
 Quality Assurance Section  
 CEOLUS Production Department



## Sertifikat Analisis Magnesium Stearat



Partner der Industrie

# QUALITÄTSMANAGEMENT

### CERTIFICATE OF ANALYSIS

customer: PT BRATACO  
 contact person:  
 FAX:  
 your order-number: PTB0735/V1104      our order-number: 4011746  
 delivered on: 04.08.2004      quantity: 9000  
 brand: LIGA MAGNESIUM STEARATE MF-2-V VEGETABLE      charge-no. C447176  
 manufacturing date: 2004-07-19      expiry date: 2006-07-19

product is in accordance with the USP27/NF22/BP2003/Ph.Eur 4rd ed./DAB10/JP 14th. ed./FCC 5th. ed.

| parameter                               | unit              | method    | result           |
|---|-------------------|-----------|------------------|
| identification A                        | °C                | Ph.Eur    | 59               |
| identification A                        | metal reaction    | USP/NF    | passes test      |
| identification B                        | retention time GC | USP/NF    | retentions match |
| identity or                             | ml 0,01N HCl      | Ph.Eur    | <0,5             |
| acidity                                 | ml 0.01 N NaOH    | Ph.Eur    | <0,5             |
| heavy metals as Pb                      | ppm               | JP        | <20              |
| lead                                    | ppm               | BAE 300-B | <1               |
| cadmium                                 | ppm               | BAE 300-B | <1               |
| nickel                                  | ppm               | BAE 300-B | <1               |
| chloride                                | %                 | Ph.Eur    | <0,1             |
| sulfate                                 | %                 | Ph.Eur    | <0,5             |
| acid value of the fatty acid            | mg KOH/g          | Ph.Eur    | 204,8            |
| relative content of stearic acid        | %                 | USP/NF    | 65,1             |
| rel. cont. of stearic and palmitic acid | %                 | USP/NF    | 98,9             |
| microbial count                         | cfu/g             | USP/NF    | <10              |
| Molds & Yeasts                          | cfu/g             | USP/NF    | 105              |
| Escherichia coli                        | cfu/g             | USP/NF    | absent           |
| Salmonella Species                      | cfu/g             | USP/NF    | absent           |
| organic volatile impurities             |                   | USP/NF    | meets USP/NF     |
| loss on drying                          | %                 | BAE 600   | 3,9              |
| magnesium content                       | %                 | BAE 200 c | 4,7              |
| free fatty acid                         | %                 | BAE 400   | 0,6              |
| free residue at 200 mesh                | %                 | BAE 605   | 0,2              |
| bulk density tapped                     | g/ml              | BAE 611a  | 0,32             |
| specific surface area BET               | qm/g              | USP/NF    | 10,0             |
| contamination                           |                   | BAE 801   | in accordance    |

Venlo, 27.08.04

data of the above mentioned delivery are based upon careful test according to the guidelines of our quality assurance system. They do not release the customer from entry control. Besides we do not guarantee special properties for concrete applications.  
 This certificate was issued by EDV and does not bear a signature.



**BRATACO**  
 PETER GREVEN  
 MANUFACTURER  
 DISTRIBUTOR

## Sertifikat Analisis Sodium Starch Glycolat



YUNG ZIP CHEMICAL IND. CO., LTD.  
 59, Yu Shih Road  
 Youth Industrial District  
 Tachia, Tainan, 437  
 R. O. C.  
 TEL: 886-4-26818780, 26811344 FAX: 886-4-26812911

**CERTIFICATE OF ANALYSIS**

**DST**  
 (Sodium Starch Glycolate)

Lot No.: SSGA02121

Mfg. Date: Nov. 29, 2007

Analysis Following USP 30-NF 25

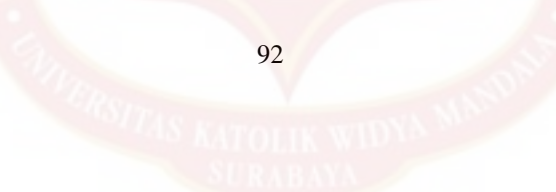
Exp. Date: Nov. 28, 2010

| ITEMS            | SPECIFICATIONS  | RESULTS              |
|------------------|---|----------------------|
| Description      | A white, tasteless, odorless, relatively free-flowing powder. | Confirmed            |
| Identification   | USP 30/NF 25  | Confirmed            |
| Microbial limits | Salmonella<br>E. Coli   | Negative<br>Negative |
| pH               | Between 5.5 and 7.5   | 6.1                  |
| Loss on drying   | Not more than 10.0 %  | 2.5 %                |
| Iron             | Not more than 0.002 %   | Passed               |
| Heavy metals     | Not more than 0.002 %   | Passed               |
| Sodium chloride  | Not more than 7.0 %   | 4.0 %                |
| Sodium glycolate | Not more than 2.0 %   | 1.8 %                |
| Assay            | Sodium (Na)<br>(2.8% to 4.2%)                                 | 3.2 %                |

**Conclusion : Passed**

*Chien-Sheng Tsong*  
 Chien-Sheng Tsong  
 Director Quality Assurance

*12/28/07*  
 Date  
 12/28/2007/40053



LAMPIRAN L

TABEL Z

| z   | 0     | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9      |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| .0  | .5000 | .5040 | .5080 | .5120 | .5160 | .5199 | .5239 | .5279 | .5319 | .5359  |
| .1  | .5398 | .5438 | .5478 | .5517 | .5557 | .5596 | .5636 | .5675 | .5714 | .5753  |
| .2  | .5793 | .5832 | .5871 | .5920 | .5948 | .5987 | .6026 | .6064 | .6103 | .6141  |
| .3  | .6179 | .6217 | .6255 | .6293 | .6221 | .6368 | .6406 | .6443 | .6480 | .6517  |
| .4  | .6554 | .6591 | .6628 | .6664 | .6700 | .6736 | .6772 | .6808 | .6844 | .6879  |
| .5  | .6915 | .6950 | .6985 | .7019 | .7054 | .7088 | .7123 | .7157 | .7190 | .7224  |
| .6  | .7257 | .7291 | .7324 | .7357 | .7389 | .7422 | .7454 | .7486 | .7517 | .7549  |
| .7  | .7580 | .7611 | .7642 | .7673 | .7703 | .7734 | .7764 | .7794 | .7823 | .7852  |
| .8  | .7881 | .7910 | .7939 | .7967 | .7995 | .8023 | .8051 | .8078 | .8106 | .8133  |
| .9  | .8159 | .8186 | .8212 | .8238 | .8264 | .8289 | .8315 | .8340 | .8365 | .8389  |
| 1.0 | .8413 | .8438 | .8461 | .8485 | .8508 | .8531 | .8554 | .8577 | .8599 | .8621  |
| 1.1 | .8643 | .8665 | .8686 | .8708 | .8729 | .8749 | .8770 | .8790 | .8810 | .8830  |
| 1.2 | .8849 | .8869 | .8888 | .8907 | .8925 | .8944 | .8962 | .8980 | .8997 | .9015  |
| 1.3 | .9032 | .9049 | .9066 | .9082 | .9099 | .9115 | .9131 | .9147 | .9162 | .9177  |
| 1.4 | .9192 | .9207 | .9222 | .9236 | .9251 | .9265 | .9278 | .9292 | .9306 | .9319  |
| 1.5 | .9332 | .9345 | .9357 | .9370 | .9382 | .9394 | .9406 | .9418 | .9430 | .9441  |
| 1.6 | .9452 | .9463 | .9474 | .9484 | .9495 | .9505 | .9515 | .9525 | .9535 | .9545  |
| 1.7 | .9554 | .9564 | .9573 | .9582 | .9591 | .9599 | .9608 | .9616 | .9625 | .9633  |
| 1.8 | .9641 | .9648 | .9656 | .9664 | .9671 | .9678 | .9686 | .9693 | .9700 | .9706  |
| 1.9 | .9713 | .9719 | .9726 | .9732 | .9738 | .9744 | .9750 | .9756 | .9762 | .9767  |
| 2.0 | .9772 | .9778 | .9783 | .9788 | .9792 | .9798 | .9803 | .9808 | .9812 | .9817  |
| 2.1 | .9821 | .9826 | .9830 | .9834 | .9838 | .9842 | .9846 | .9850 | .9854 | .9857  |
| 2.2 | .9861 | .9864 | .9868 | .9871 | .9874 | .9878 | .9881 | .9884 | .9887 | .9890  |
| 2.3 | .9893 | .9896 | .9898 | .9901 | .9904 | .9906 | .9909 | .9911 | .9913 | .9916  |
| 2.4 | .9918 | .9920 | .9922 | .9925 | .9927 | .9929 | .9931 | .9932 | .9934 | .9936  |
| 2.5 | .9938 | .9940 | .9941 | .9943 | .9945 | .9946 | .9948 | .9949 | .9951 | .9952  |
| 2.6 | .9953 | .9955 | .9956 | .9957 | .9959 | .9960 | .9961 | .9962 | .9963 | .9964  |
| 2.7 | .9965 | .9966 | .9967 | .9968 | .9969 | .9970 | .9971 | .9972 | .9973 | .9974  |
| 2.8 | .9974 | .9975 | .9976 | .9977 | .9977 | .9978 | .9979 | .9979 | .9980 | .9981  |
| 2.9 | .9981 | .9982 | .9982 | .9983 | .9984 | .9984 | .9985 | .9985 | .9986 | .9986  |
| 3.0 | .9987 | .9990 | .9993 | .9995 | .9997 | .9998 | .9998 | .9999 | .9999 | 1.0000 |

| z      | 0     | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| - 3 .  | .0013 | .0010 | .0007 | .0005 | .0003 | .0002 | .0002 | .0001 | .0001 | .0000 |
| - 2 .9 | .0019 | .0018 | .0017 | .0017 | .0016 | .0016 | .0015 | .0015 | .0014 | .0014 |
| - 2 .8 | .0026 | .0025 | .0024 | .0023 | .0023 | .0022 | .0021 | .0021 | .0020 | .0019 |
| - 2 .7 | .0035 | .0034 | .0033 | .0032 | .0031 | .0030 | .0029 | .0028 | .0027 | .0026 |
| - 2 .6 | .0047 | .0045 | .0044 | .0043 | .0041 | .0040 | .0039 | .0038 | .0037 | .0036 |
| - 2 .5 | .0062 | .0060 | .0059 | .0057 | .0055 | .0054 | .0052 | .0051 | .0049 | .0048 |
| - 2 .4 | .0082 | .0080 | .0078 | .0075 | .0073 | .0071 | .0069 | .0068 | .0066 | .0064 |
| - 2 .3 | .0107 | .0104 | .0102 | .0099 | .0096 | .0094 | .0091 | .0089 | .0087 | .0084 |
| - 2 .2 | .0139 | .0136 | .0132 | .0129 | .0126 | .0122 | .0119 | .0116 | .0113 | .0110 |
| - 2 .1 | .0179 | .0174 | .0170 | .0166 | .0162 | .0158 | .0154 | .0150 | .0146 | .0143 |
| - 2 .0 | .0228 | .0222 | .0217 | .0212 | .0207 | .0202 | .0197 | .0192 | .0188 | .0183 |
| - 1 .9 | .0287 | .0281 | .0274 | .0268 | .0262 | .0256 | .0250 | .0244 | .0238 | .0233 |
| - 1 .8 | .0359 | .0352 | .0344 | .0336 | .0329 | .0322 | .0314 | .0307 | .0300 | .0294 |
| - 1 .7 | .0446 | .0436 | .0427 | .0418 | .0409 | .0401 | .0392 | .0384 | .0375 | .0367 |
| - 1 .6 | .0548 | .0537 | .0526 | .0516 | .0505 | .0495 | .0485 | .0475 | .0465 | .0455 |
| - 1 .5 | .0668 | .0655 | .0643 | .0630 | .0618 | .0606 | .0594 | .0582 | .0570 | .0559 |
| - 1 .4 | .0806 | .0793 | .0778 | .0764 | .0749 | .0735 | .0722 | .0708 | .0694 | .0681 |
| - 1 .3 | .0968 | .0951 | .0934 | .0918 | .0901 | .0885 | .0869 | .0853 | .0838 | .0823 |
| - 1 .2 | .1151 | .1131 | .1112 | .1093 | .1075 | .1056 | .1038 | .1020 | .1003 | .0985 |
| - 1 .1 | .1357 | .1335 | .1314 | .1292 | .1271 | .1251 | .1230 | .1210 | .1190 | .1170 |
| - 1 .0 | .1587 | .1562 | .1539 | .1515 | .1492 | .1469 | .1446 | .1423 | .1401 | .1379 |
| - .9   | .1841 | .1814 | .1788 | .1762 | .1736 | .1711 | .1685 | .1660 | .1635 | .1611 |
| - .8   | .2119 | .2090 | .2061 | .2033 | .2005 | .1977 | .1949 | .1922 | .1894 | .1867 |
| - .7   | .2420 | .2389 | .2358 | .2327 | .2297 | .2266 | .2236 | .2206 | .2177 | .2140 |
| - .6   | .2743 | .2709 | .2676 | .2643 | .2611 | .2578 | .2546 | .2514 | .2483 | .2451 |
| - .5   | .3065 | .3030 | .3015 | .2981 | .2946 | .2912 | .2877 | .2843 | .2810 | .2776 |
| - .4   | .3446 | .3409 | .3372 | .3336 | .3300 | .3264 | .3228 | .3192 | .3156 | .3121 |
| - .3   | .3821 | .3783 | .3745 | .3707 | .3669 | .3632 | .3594 | .3557 | .3520 | .3483 |
| - .2   | .4207 | .4168 | .4129 | .4090 | .4052 | .4013 | .3974 | .3936 | .3897 | .3859 |
| - .1   | .4602 | .4562 | .4522 | .4483 | .4443 | .4404 | .4364 | .4325 | .4286 | .4247 |
| - .0   | .5000 | .4960 | .4920 | .4880 | .4840 | .4801 | .4761 | .4721 | .4681 | .4641 |

Dikutip dari: Gennaro, A.R. (1970)



LAMPIRAN M

TABEL UJI R

| DEGREES OF FREEDOM (DF) | 5 PERCENT | 1 PERCENT | DEGREES OF FREEDOM (DF) | 5 PERCENT | 1 PERCENT |
|-------------------------|-----------|-----------|-------------------------|-----------|-----------|
| 1                       | .997      | 1.000     | 24                      | .388      | .496      |
| 2                       | .950      | .990      | 25                      | .381      | .487      |
| 3                       | .878      | .959      | 26                      | .374      | .478      |
| 4                       | .811      | .917      | 27                      | .367      | .470      |
| 5                       | .754      | .874      | 28                      | .361      | .463      |
| 6                       | .707      | .834      | 29                      | .355      | .456      |
| 7                       | .666      | .798      | 30                      | .349      | .449      |
| 8                       | .632      | .765      | 35                      | .325      | .418      |
| 9                       | .602      | .735      | 40                      | .304      | .393      |
| 10                      | .576      | .708      | 48                      | .288      | .372      |
| 11                      | .553      | .684      | 50                      | .273      | .354      |
| 12                      | .532      | .661      | 60                      | .250      | .325      |
| 13                      | .514      | .641      | 70                      | .232      | .302      |
| 14                      | .497      | .623      | 80                      | .217      | .283      |
| 15                      | .482      | .606      | 90                      | .205      | .267      |
| 16                      | .468      | .590      | 100                     | .195      | .254      |
| 17                      | .456      | .575      | 125                     | .174      | .228      |
| 18                      | .444      | .561      | 150                     | .159      | .208      |
| 19                      | .433      | .549      | 200                     | .138      | .181      |
| 20                      | .423      | .537      | 300                     | .113      | .148      |
| 21                      | .413      | .526      | 400                     | .098      | .128      |
| 22                      | .404      | .515      | 500                     | .088      | .115      |
| 23                      | .396      | .505      | 1000                    | .062      | .081      |

Dikutip dari: Soedigdo & Soedigdo (1977)

LAMPIRAN N  
Tabel Uji HSD (0,05)

| k<br>d. k. | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   |
|------------|------|------|------|------|------|------|------|------|------|------|
| 5          | 3.64 | 4.60 | 5.22 | 5.67 | 6.03 | 6.33 | 6.58 | 6.80 | 6.99 | 7.17 |
| 6          | 3.46 | 4.34 | 4.90 | 5.30 | 5.63 | 5.90 | 6.12 | 6.32 | 6.49 | 6.65 |
| 7          | 3.34 | 4.16 | 4.68 | 5.06 | 5.36 | 5.61 | 5.82 | 6.00 | 6.16 | 6.30 |
| 8          | 3.26 | 4.04 | 4.53 | 4.89 | 5.17 | 5.40 | 5.60 | 5.77 | 5.92 | 6.05 |
| 9          | 3.20 | 3.95 | 4.41 | 4.76 | 5.02 | 5.24 | 5.43 | 5.59 | 5.74 | 5.87 |
| 10         | 3.15 | 3.88 | 4.33 | 4.65 | 4.91 | 5.12 | 5.30 | 5.46 | 5.60 | 5.72 |
| 11         | 3.11 | 3.82 | 4.26 | 4.57 | 4.82 | 5.03 | 5.20 | 5.35 | 5.49 | 5.61 |
| 12         | 3.08 | 3.77 | 4.20 | 4.51 | 4.75 | 4.95 | 5.12 | 5.27 | 5.39 | 5.51 |
| 13         | 3.06 | 3.73 | 4.15 | 4.45 | 4.69 | 4.88 | 5.05 | 5.19 | 5.32 | 5.43 |
| 14         | 3.03 | 3.70 | 4.11 | 4.41 | 4.64 | 4.83 | 4.99 | 5.13 | 5.25 | 5.36 |
| 15         | 3.01 | 3.67 | 4.08 | 4.37 | 4.59 | 4.78 | 4.94 | 5.08 | 5.20 | 5.31 |
| 16         | 3.00 | 3.65 | 4.05 | 4.33 | 4.56 | 4.74 | 4.90 | 5.03 | 5.15 | 5.26 |
| 17         | 2.98 | 3.63 | 4.02 | 4.30 | 4.52 | 4.71 | 4.86 | 4.99 | 5.11 | 5.21 |
| 18         | 2.97 | 3.61 | 4.00 | 4.28 | 4.49 | 4.67 | 4.82 | 4.96 | 5.07 | 5.17 |
| 19         | 2.96 | 3.59 | 3.98 | 4.25 | 4.47 | 4.65 | 4.79 | 4.92 | 5.04 | 5.14 |
| 20         | 2.95 | 3.58 | 3.96 | 4.23 | 4.45 | 4.62 | 4.77 | 4.90 | 5.01 | 5.11 |
| 24         | 2.92 | 3.53 | 3.90 | 4.17 | 4.37 | 4.54 | 4.68 | 4.81 | 4.92 | 5.01 |
| 30         | 2.89 | 3.49 | 3.85 | 4.10 | 4.30 | 4.46 | 4.60 | 4.72 | 4.82 | 4.92 |
| 40         | 2.86 | 3.44 | 3.79 | 4.04 | 4.23 | 4.39 | 4.52 | 4.63 | 4.73 | 4.82 |
| 60         | 2.83 | 3.40 | 3.74 | 3.98 | 4.16 | 4.31 | 4.44 | 4.55 | 4.65 | 4.73 |
| 120        | 2.80 | 3.36 | 3.68 | 3.92 | 4.10 | 4.24 | 4.36 | 4.47 | 4.56 | 4.64 |
| $\infty$   | 2.77 | 3.31 | 3.63 | 3.86 | 4.03 | 4.17 | 4.29 | 4.39 | 4.47 | 4.55 |

Catatan kaki: Dari *Annals of mathematical statistics*. Diulang cetak seizin penerbit, The Institute of Mathematical Statistics.

Sumber: Scheffler (1987).

LAMPIRAN O

HASIL UJI STATISTIK KEKERASAN TABLET ANTAR FORMULA

Anova: Single Factor

SUMMARY

| <i>Groups</i> | <i>Count</i> | <i>Sum</i> | <i>Average</i> | <i>Variance</i> |
|---------------|--------------|------------|----------------|-----------------|
| Column 1      | 3            | 48.41      | 16.13667       | 0.080033        |
| Column 2      | 3            | 39.89      | 13.29667       | 26.34563        |
| Column 3      | 3            | 37.27      | 12.42333       | 16.17763        |
| Column 4      | 3            | 43.02      | 14.34          | 3.9628          |

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ANOVA

| <i>Source of Variation</i> | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>P-value</i> | <i>F crit</i> |
|----------------------------|-----------|-----------|-----------|----------|----------------|---------------|
| Between Groups             | 22.95549  | 3         | 7.651831  | 0.657288 | 0.600814       | 4.066181      |
| Within Groups              | 93.1322   | 8         | 11.64153  |          |                |               |
| Total                      | 116.0877  | 11        |           |          |                |               |

Keterangan:

Fhitung= 0,657288 < F0,05(3,8)=4,07 sehingga H diterima dan tidak ada perbedaan yang bermakna antar formula.



**LAMPIRAN P**  
**HASIL UJI STATISTIK WAKTU HANCUR ANTAR FORMULA**

Anova: Single Factor  
SUMMARY

| <i>Groups</i> | <i>Count</i> | <i>Sum</i> | <i>Average</i> | <i>Variance</i> |
|---------------|--------------|------------|----------------|-----------------|
| Column 1      | 3            | 4          | 1.333333       | 0.333333        |
| Column 2      | 3            | 7          | 2.333333       | 0.333333        |
| Column 3      | 3            | 8          | 2.666667       | 0.333333        |
| Column 4      | 3            | 8          | 2.666667       | 0.333333        |

ANOVA

| <i>Source of Variation</i> | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>P-value</i> | <i>F crit</i> |
|----------------------------|-----------|-----------|-----------|----------|----------------|---------------|
| Between Groups             | 3.583333  | 3         | 1.194444  | 3.583333 | 0.066101       | 4.066181      |
| Within Groups              | 2.666667  | 8         | 0.333333  |          |                |               |
| Total                      | 6.25      | 11        |           |          |                |               |

Keterangan:

Fhitung = 3,583333 < F0,05 (3,8) = 4,07 sehingga H0 diterima dan tidak ada perbedaan yang bermakna antar formula.

**LAMPIRAN Q**  
**HASIL UJI STATISTIK KERAPUHAN ANTAR FORMULA**

Anova: Single Factor  
SUMMARY

| <i>Groups</i> | <i>Count</i> | <i>Sum</i> | <i>Average</i> | <i>Variance</i> |
|---------------|--------------|------------|----------------|-----------------|
| Column 1      | 3            | 1.535      | 0.511667       | 0.762608        |
| Column 2      | 3            | 0.07       | 0.023333       | 3.33E-05        |
| Column 3      | 3            | 0.045      | 0.015          | 0.000025        |
| Column 4      | 3            | 0.11       | 0.036667       | 3.33E-05        |

ANOVA

| <i>Source of Variation</i> | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>P-value</i> | <i>F crit</i> |
|----------------------------|-----------|-----------|-----------|----------|----------------|---------------|
| Between Groups             | 0.533617  | 3         | 0.177872  | 0.932855 | 0.468337       | 4.066181      |
| Within Groups              | 1.5254    | 8         | 0.190675  |          |                |               |
| Total                      | 2.059017  | 11        |           |          |                |               |

Keterangan:

Fhitung = 0,932855 < F0,05 (3,8) = 4,07 sehingga H diterima dan tidak ada perbedaan yang bermakna antar formula.

## LAMPIRAN R

### HASIL UJI STATISTIK DISTRIBUSI UKURAN PARTIKEL ( $d_g$ 50%) ANTAR FORMULA

Anova: Single Factor

#### SUMMARY

| <i>Groups</i> | <i>Count</i> | <i>Sum</i> | <i>Average</i> | <i>Variance</i> |
|---------------|--------------|------------|----------------|-----------------|
| Column 1      | 3            | 301.13     | 100.3767       | 4.046033        |
| Column 2      | 3            | 319.79     | 106.5967       | 19.17603        |
| Column 3      | 3            | 324.23     | 108.0767       | 3.220033        |
| Column 4      | 3            | 319.35     | 106.45         | 15.1956         |

#### ANOVA

| <i>Source of Variation</i> | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>P-value</i> | <i>F crit</i> |
|----------------------------|-----------|-----------|-----------|----------|----------------|---------------|
| Between Groups             | 104.7913  | 3         | 34.93043  | 3.355654 | 0.075911       | 4.066181      |
| Within Groups              | 83.2754   | 8         | 10.40943  |          |                |               |
| Total                      | 188.0667  | 11        |           |          |                |               |

Keterangan:

Fhitung = 0,932855 < F0,05(3,8) = 4,07 sehingga H diterima dan tidak ada perbedaan yang bermakna antar formula.

## LAMPIRAN S

### HASIL UJI STATISTIK PENETAPAN KADAR TABLET LIKUISOLID PIROKSIKAM ANTAR FORMULA

**PK**

Anova: Single Factor

#### SUMMARY

| <i>Groups</i> | <i>Count</i> | <i>Sum</i> | <i>Average</i> | <i>Variance</i> |
|---------------|--------------|------------|----------------|-----------------|
| Column 1      | 3            | 286.6      | 95.53333       | 1.610633        |
| Column 2      | 3            | 289.75     | 96.58333       | 10.20463        |
| Column 3      | 3            | 290.57     | 96.85667       | 0.568233        |
| Column 4      | 3            | 293.18     | 97.72667       | 4.020433        |

#### ANOVA

| <i>Source of Variation</i> | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>P-value</i> | <i>F crit</i> |
|----------------------------|-----------|-----------|-----------|----------|----------------|---------------|
| Between Groups             | 7.352433  | 3         | 2.450811  | 0.597615 | 0.634236       | 4.066181      |
| Within Groups              | 32.80787  | 8         | 4.100983  |          |                |               |
| Total                      | 40.1603   | 11        |           |          |                |               |

Keterangan:

Fhitung = 0,597615 < F0,05(3,8) = 4,07 sehingga H0 diterima dan tidak ada perbedaan yang bermakna antar formula.

**LAMPIRAN T**  
**HASIL UJI STATISTIK DISOLUSI BERDASARKAN %ED<sub>60</sub> TABLET LIKUISOLID PIROKSIKAM**  
**ANTAR FORMULA**

Anova: Single Factor  
SUMMARY

| <i>Groups</i> | <i>Count</i> | <i>Sum</i> | <i>Average</i> | <i>Variance</i> |
|---------------|--------------|------------|----------------|-----------------|
| Column 1      | 3            | 143.1479   | 47.71597       | 13.20442        |
| Column 2      | 3            | 163.46     | 54.48667       | 7.106533        |
| Column 3      | 3            | 219.5      | 73.16667       | 0.321733        |
| Column 4      | 3            | 241.37     | 80.45667       | 2.421633        |

ANOVA

| <i>Source of Variation</i> | <i>SS</i> | <i>df</i> | <i>MS</i> | <i>F</i> | <i>P-value</i> | <i>F crit</i> |
|----------------------------|-----------|-----------|-----------|----------|----------------|---------------|
| Between Groups             | 2131.546  | 3         | 710.5153  | 123.2767 | 4.9E-07        | 4.066181      |
| Within Groups              | 46.10863  | 8         | 5.763579  |          |                |               |
| Total                      | 2177.655  | 11        |           |          |                |               |

Keterangan:

Fhitung = 123,2767 > F0,05 (3,8) = 4,07 sehingga H<sub>0</sub> ditolak dan ada perbedaan yang bermakna antarformula.

### Hasil Uji HSD

| HSD =4.849506 |          |          |            |           |          |  |          |
|---------------|----------|----------|------------|-----------|----------|--|----------|
|               |          | FA       | FB         |           | FC       |  | FD       |
|               | Mean     | 47.71597 | 54.48667   |           | 73.16667 |  | 80.45667 |
| FA            | 47.71597 | 0        | 6.770699 * | 25.4507 * | 32.7407  |  |          |
| FB            | 54.48667 |          | 0          | 18.68 *   | 25.97    |  |          |
| FC            | 73.16667 |          |            | 0         | 7.29     |  |          |
| FD            | 80.45667 |          |            |           | 0        |  |          |





**LAMPIRAN U**  
**UJI F KURVA BAKU PENETAPAN KADAR**

Uji Kesamaan Regresi (HCl)

**REPLIKASI I**

| <b>KONSENTRASI</b> | <b>ABSORBANSI</b> | <b>X<sup>2</sup></b> | <b>Y<sup>2</sup></b> | <b>XY</b> |
|--------------------|-------------------|----------------------|----------------------|-----------|
| 2,064              | 0,188             | 4,2601               | 0,0353               | 0,3880    |
| 4,128              | 0,388             | 17,0404              | 0,1505               | 1,6017    |
| 6,192              | 0,478             | 38,3409              | 0,2285               | 2,9598    |
| 8,256              | 0,624             | 68,1615              | 0,3894               | 5,1517    |
| 10,32              | 0,841             | 106,5024             | 0,7073               | 8,6791    |
|                    |                   | 234,3053             | 1,5110               | 18,7803   |

**REPLIKASI II**

| <b>KONSENTRASI</b> | <b>ABSORBANSI</b> | <b>X<sup>2</sup></b> | <b>Y<sup>2</sup></b> | <b>XY</b> |
|--------------------|-------------------|----------------------|----------------------|-----------|
| 2,08               | 0,19              | 4,3264               | 0,0361               | 0,3952    |
| 4,16               | 0,346             | 17,3056              | 0,1197               | 1,4394    |
| 6,24               | 0,498             | 38,9376              | 0,2480               | 3,1075    |
| 8,32               | 0,649             | 69,2224              | 0,4212               | 5,3997    |
| 10,4               | 0,85              | 108,1600             | 0,7225               | 8,8400    |
|                    |                   | 237,9520             | 1,5475               | 19,1818   |

**REPLIKASI III**

| <b>KONSENTRASI</b> | <b>ABSORBANSI</b> | <b>X<sup>2</sup></b> | <b>Y<sup>2</sup></b> | <b>XY</b> |
|--------------------|-------------------|----------------------|----------------------|-----------|
| 2,052              | 0,208             | 4,2107               | 0,0433               | 0,4268    |
| 4,104              | 0,377             | 16,8428              | 0,1421               | 1,5472    |
| 6,156              | 0,509             | 37,8963              | 0,2591               | 3,1334    |
| 8,208              | 0,692             | 67,3713              | 0,4789               | 5,6799    |
| 10,26              | 0,848             | 105,2676             | 0,7191               | 8,7005    |
|                    |                   | 231,5887             | 1,6424               | 19,4878   |

|             | <b>S X<sup>2</sup></b> | <b>SXY</b> | <b>S Y<sup>2</sup></b> | <b>N</b> | <b>SSi</b> | <b>RDF</b> |
|-------------|------------------------|------------|------------------------|----------|------------|------------|
| Regresi I   | 234,3053               | 18,7803    | 1,5110                 | 5        | 1,4309     | 4          |
| Regresi II  | 237,9520               | 19,1818    | 1,5475                 | 5        | 1,4669     | 4          |
| Regresi III | 231,5887               | 19,4878    | 1,6424                 | 5        | 1,5583     | 4          |
|             | 703,8460               | 57,4499    | 4,7010                 |          | 4,4561     |            |

Ssc = 4,619369117

F = 0,219867029 < F0.05(2,12) 3.89

