

## LAMPIRAN A

### PEMBERIAN DOSIS dan VOLUME PEMBERIAN SENYAWA UJI

Perhitungan dosis dan volume pemberian sediaan uji senyawa Asam O-(4-metoksibenzoil) salisila, dihitung dengan rumus :

$$\text{Dosis pemberian} = \frac{\text{BeratBadanTikus}}{1000g} \times \text{Dosis}$$

$$\text{Volume Pemberian} = \frac{\text{Dosis}}{\text{Konsentrasisediaan}}$$

Perhitungan dosis:

1. 30 mg/kgBB

$$\text{Misal: Untuk tikus dengan berat } 200g = \frac{200}{1000} \times 30mg = 6 \text{ mg}/200 \text{ gram BB}$$

$$\text{Volume pemberian : } \frac{6mg}{6mg / ml} = 1ml \text{ sediaan dengan konsentrasi } 6 \text{ mg/ml}$$

2. 45 mg/kgBB

$$\text{Misal: Untuk tikus dengan berat } 200g = \frac{200}{1000} \times 45mg = 9 \text{ mg}/200 \text{ gram BB}$$

$$\text{Volume pemberian : } \frac{9mg}{9mg / ml} = 1ml \text{ sediaan dengan konsentrasi } 9 \text{ mg/ml}$$

3. 60 mg/kgBB

$$\text{Misal: Untuk tikus dengan berat } 200g = \frac{200}{1000} \times 60mg = 12 \text{ mg}/200 \text{ gram BB}$$

BB

$$\text{Volume pemberian : } \frac{12mg}{12mg / ml} = 1ml \text{ sediaan dengan konsentrasi } 12$$

mg/ml

## LAMPIRAN B

### HASIL UJI HSD ANTARA KELOMPOK SENYAWA UJI ASAM O-(4-METOKSIBENZOIL) SALISILAT, SENYAWA PEMBANDING ASETOSAL, DAN KONTROL PGA 3%

Data perhitungan statistik Antipiretik :

Perhitungan Anava dan HSD 5% Asam O-(4-metoksibenzoil) salisilat pada menit ke-0, menit ke-30, 60, 90, 120, 150, dan 180

**ANOVA**

|               |                | Sum of Squares | df | Mean Square | F       | Sig. |
|---------------|----------------|----------------|----|-------------|---------|------|
| menit ke-0    | Between Groups | .460           | 4  | .115        | 1.045   | .409 |
|               | Within Groups  | 2.200          | 20 | .110        |         |      |
|               | Total          | 2.660          | 24 |             |         |      |
| menit ke-30   | Between Groups | .460           | 4  | .115        | 1.045   | .409 |
|               | Within Groups  | 2.200          | 20 | .110        |         |      |
|               | Total          | 2.660          | 24 |             |         |      |
| menit ke-60   | Between Groups | .460           | 4  | .115        | 1.045   | .409 |
|               | Within Groups  | 2.200          | 20 | .110        |         |      |
|               | Total          | 2.660          | 24 |             |         |      |
| menit ke-90   | Between Groups | .540           | 4  | .135        | 1.588   | .216 |
|               | Within Groups  | 1.700          | 20 | .085        |         |      |
|               | Total          | 2.240          | 24 |             |         |      |
| menit ke-120  | Between Groups | .540           | 4  | .135        | 1.588   | .216 |
|               | Within Groups  | 1.700          | 20 | .085        |         |      |
|               | Total          | 2.240          | 24 |             |         |      |
| menit ke-00   | Between Groups | .540           | 4  | .135        | 1.588   | .216 |
|               | Within Groups  | 1.700          | 20 | .085        |         |      |
|               | Total          | 2.240          | 24 |             |         |      |
| menit ke-030  | Between Groups | .860           | 4  | .215        | 3.071   | .040 |
|               | Within Groups  | 1.400          | 20 | .070        |         |      |
|               | Total          | 2.260          | 24 |             |         |      |
| menit ke-060  | Between Groups | 3.940          | 4  | .985        | 12.313  | .000 |
|               | Within Groups  | 1.600          | 20 | .080        |         |      |
|               | Total          | 5.540          | 24 |             |         |      |
| menit ke-090  | Between Groups | 6.640          | 4  | 1.660       | 20.750  | .000 |
|               | Within Groups  | 1.600          | 20 | .080        |         |      |
|               | Total          | 8.240          | 24 |             |         |      |
| menit ke-0120 | Between Groups | 15.340         | 4  | 3.835       | 45.118  | .000 |
|               | Within Groups  | 1.700          | 20 | .085        |         |      |
|               | Total          | 17.040         | 24 |             |         |      |
| menit ke-0150 | Between Groups | 15.240         | 4  | 3.810       | 44.824  | .000 |
|               | Within Groups  | 1.700          | 20 | .085        |         |      |
|               | Total          | 16.940         | 24 |             |         |      |
| menit ke-180  | Between Groups | 27.460         | 4  | 6.865       | 457.667 | .000 |
|               | Within Groups  | .300           | 20 | .015        |         |      |
|               | Total          | 27.760         | 24 |             |         |      |

| Dependent Variable | (I) kelom pok | (J) kelom pok | Mean Difference (I-J) | Std. Error | Sig.  | 95% Confidence Interval |             |
|--------------------|---------------|---------------|-----------------------|------------|-------|-------------------------|-------------|
|                    |               |               |                       |            |       | Lower Bound             | Upper Bound |
| menit ke-0         | 1             | 2             | -.20000               | .20976     | .352  | -.6376                  | .2376       |
|                    |               | 3             | -.30000               | .20976     | .168  | -.7376                  | .1376       |
|                    |               | 4             | -.40000               | .20976     | .071  | -.8376                  | .0376       |
|                    |               | 5             | -.30000               | .20976     | .168  | -.7376                  | .1376       |
|                    | 2             | 1             | .20000                | .20976     | .352  | -.2376                  | .6376       |
|                    |               | 3             | -.10000               | .20976     | .639  | -.5376                  | .3376       |
|                    |               | 4             | -.20000               | .20976     | .352  | -.6376                  | .2376       |
|                    | 3             | 1             | .30000                | .20976     | .168  | -.1376                  | .7376       |
|                    |               | 2             | .10000                | .20976     | .639  | -.3376                  | .5376       |
|                    |               | 4             | -.10000               | .20976     | .639  | -.5376                  | .3376       |
|                    | 4             | 5             | .00000                | .20976     | 1.000 | -.4376                  | .4376       |
|                    |               | 1             | .40000                | .20976     | .071  | -.0376                  | .8376       |
|                    |               | 2             | .20000                | .20976     | .352  | -.2376                  | .6376       |
|                    |               | 3             | .10000                | .20976     | .639  | -.3376                  | .5376       |
|                    | 5             | 5             | .10000                | .20976     | .639  | -.3376                  | .5376       |
|                    |               | 1             | .30000                | .20976     | .168  | -.1376                  | .7376       |
|                    |               | 2             | .10000                | .20976     | .639  | -.3376                  | .5376       |
|                    |               | 3             | .00000                | .20976     | 1.000 | -.4376                  | .4376       |
|                    |               | 4             | -.10000               | .20976     | .639  | -.5376                  | .3376       |
| menit ke-30        | 1             | 2             | -.20000               | .20976     | .352  | -.6376                  | .2376       |
|                    |               | 3             | -.30000               | .20976     | .168  | -.7376                  | .1376       |
|                    |               | 4             | -.40000               | .20976     | .071  | -.8376                  | .0376       |
|                    |               | 5             | -.30000               | .20976     | .168  | -.7376                  | .1376       |
|                    | 2             | 1             | .20000                | .20976     | .352  | -.2376                  | .6376       |
|                    |               | 3             | -.10000               | .20976     | .639  | -.5376                  | .3376       |
|                    |               | 4             | -.20000               | .20976     | .352  | -.6376                  | .2376       |
|                    | 3             | 5             | -.10000               | .20976     | .639  | -.5376                  | .3376       |
|                    |               | 1             | .30000                | .20976     | .168  | -.1376                  | .7376       |
|                    |               | 2             | .10000                | .20976     | .639  | -.3376                  | .5376       |
|                    |               | 4             | -.10000               | .20976     | .639  | -.5376                  | .3376       |
|                    |               | 5             | .00000                | .20976     | 1.000 | -.4376                  | .4376       |

|             |   |                      |        |       |        |        |
|-------------|---|----------------------|--------|-------|--------|--------|
| 4           | 1 | .40000               | .20976 | .071  | -.0376 | .8376  |
|             | 2 | .20000               | .20976 | .352  | -.2376 | .6376  |
|             | 3 | .10000               | .20976 | .639  | -.3376 | .5376  |
|             | 5 | .10000               | .20976 | .639  | -.3376 | .5376  |
| 5           | 1 | .30000               | .20976 | .168  | -.1376 | .7376  |
|             | 2 | .10000               | .20976 | .639  | -.3376 | .5376  |
|             | 3 | .00000               | .20976 | 1.000 | -.4376 | .4376  |
|             | 4 | -.10000              | .20976 | .639  | -.5376 | .3376  |
| menit ke-60 |   |                      |        |       |        |        |
| 1           | 2 | -.20000              | .20976 | .352  | -.6376 | .2376  |
|             | 3 | -.30000              | .20976 | .168  | -.7376 | .1376  |
|             | 4 | -.40000              | .20976 | .071  | -.8376 | .0376  |
|             | 5 | -.30000              | .20976 | .168  | -.7376 | .1376  |
| 2           | 1 | .20000               | .20976 | .352  | -.2376 | .6376  |
|             | 3 | -.10000              | .20976 | .639  | -.5376 | .3376  |
|             | 4 | -.20000              | .20976 | .352  | -.6376 | .2376  |
|             | 5 | -.10000              | .20976 | .639  | -.5376 | .3376  |
| 3           | 1 | .30000               | .20976 | .168  | -.1376 | .7376  |
|             | 2 | .10000               | .20976 | .639  | -.3376 | .5376  |
|             | 4 | -.10000              | .20976 | .639  | -.5376 | .3376  |
|             | 5 | .00000               | .20976 | 1.000 | -.4376 | .4376  |
| 4           | 1 | .40000               | .20976 | .071  | -.0376 | .8376  |
|             | 2 | .20000               | .20976 | .352  | -.2376 | .6376  |
|             | 3 | .10000               | .20976 | .639  | -.3376 | .5376  |
|             | 5 | .10000               | .20976 | .639  | -.3376 | .5376  |
| 5           | 1 | .30000               | .20976 | .168  | -.1376 | .7376  |
|             | 2 | .10000               | .20976 | .639  | -.3376 | .5376  |
|             | 3 | .00000               | .20976 | 1.000 | -.4376 | .4376  |
|             | 4 | -.10000              | .20976 | .639  | -.5376 | .3376  |
| menit ke-90 |   |                      |        |       |        |        |
| 1           | 2 | -.30000              | .18439 | .119  | -.6846 | .0846  |
|             | 3 | -.40000 <sup>*</sup> | .18439 | .042  | -.7846 | -.0154 |
|             | 4 | -.40000 <sup>*</sup> | .18439 | .042  | -.7846 | -.0154 |
|             | 5 | -.30000              | .18439 | .119  | -.6846 | .0846  |
| 2           | 1 | .30000               | .18439 | .119  | -.0846 | .6846  |
|             | 3 | -.10000              | .18439 | .594  | -.4846 | .2846  |
|             | 4 | -.10000              | .18439 | .594  | -.4846 | .2846  |

|              |   |   |                       |        |       |        |        |
|--------------|---|---|-----------------------|--------|-------|--------|--------|
|              |   | 5 | .00000                | .18439 | 1.000 | -.3846 | .3846  |
|              |   | 1 | .40000 <sup>st</sup>  | .18439 | .042  | .0154  | .7846  |
|              | 3 | 2 | .10000                | .18439 | .594  | -.2846 | .4846  |
|              |   | 4 | .00000                | .18439 | 1.000 | -.3846 | .3846  |
|              |   | 5 | .10000                | .18439 | .594  | -.2846 | .4846  |
|              |   | 1 | .40000 <sup>st</sup>  | .18439 | .042  | .0154  | .7846  |
|              | 4 | 2 | .10000                | .18439 | .594  | -.2846 | .4846  |
|              |   | 3 | .00000                | .18439 | 1.000 | -.3846 | .3846  |
|              |   | 5 | .10000                | .18439 | .594  | -.2846 | .4846  |
|              |   | 1 | .30000                | .18439 | .119  | -.0846 | .6846  |
|              | 5 | 2 | .00000                | .18439 | 1.000 | -.3846 | .3846  |
|              |   | 3 | -.10000               | .18439 | .594  | -.4846 | .2846  |
|              |   | 4 | -.10000               | .18439 | .594  | -.4846 | .2846  |
| menit ke-120 |   | 2 | -.30000               | .18439 | .119  | -.6846 | .0846  |
|              |   | 3 | -.40000 <sup>st</sup> | .18439 | .042  | -.7846 | -.0154 |
|              | 1 | 4 | -.40000 <sup>st</sup> | .18439 | .042  | -.7846 | -.0154 |
|              |   | 5 | -.30000               | .18439 | .119  | -.6846 | .0846  |
|              |   | 1 | .30000                | .18439 | .119  | -.0846 | .6846  |
|              | 2 | 3 | -.10000               | .18439 | .594  | -.4846 | .2846  |
|              |   | 4 | -.10000               | .18439 | .594  | -.4846 | .2846  |
|              |   | 5 | .00000                | .18439 | 1.000 | -.3846 | .3846  |
|              |   | 1 | .40000 <sup>st</sup>  | .18439 | .042  | .0154  | .7846  |
|              | 3 | 2 | .10000                | .18439 | .594  | -.2846 | .4846  |
|              |   | 4 | .00000                | .18439 | 1.000 | -.3846 | .3846  |
|              |   | 5 | .10000                | .18439 | .594  | -.2846 | .4846  |
|              |   | 1 | .40000 <sup>st</sup>  | .18439 | .042  | .0154  | .7846  |
|              | 4 | 2 | .10000                | .18439 | .594  | -.2846 | .4846  |
|              |   | 3 | .00000                | .18439 | 1.000 | -.3846 | .3846  |
|              |   | 5 | .10000                | .18439 | .594  | -.2846 | .4846  |
|              |   | 1 | .30000                | .18439 | .119  | -.0846 | .6846  |
|              | 5 | 2 | .00000                | .18439 | 1.000 | -.3846 | .3846  |
|              |   | 3 | -.10000               | .18439 | .594  | -.4846 | .2846  |
|              |   | 4 | -.10000               | .18439 | .594  | -.4846 | .2846  |
| menit ke-00  |   | 2 | -.30000               | .18439 | .119  | -.6846 | .0846  |
|              | 1 | 3 | -.40000 <sup>st</sup> | .18439 | .042  | -.7846 | -.0154 |

|              |   |                       |        |       |        |        |
|--------------|---|-----------------------|--------|-------|--------|--------|
|              | 4 | -.40000 <sup>ac</sup> | .18439 | .042  | -.7846 | -.0154 |
|              | 5 | -.30000               | .18439 | .119  | -.6846 | .0846  |
|              | 1 | .30000                | .18439 | .119  | -.0846 | .6846  |
| 2            | 3 | -.10000               | .18439 | .594  | -.4846 | .2846  |
|              | 4 | -.10000               | .18439 | .594  | -.4846 | .2846  |
|              | 5 | .00000                | .18439 | 1.000 | -.3846 | .3846  |
|              | 1 | .40000 <sup>ac</sup>  | .18439 | .042  | .0154  | .7846  |
| 3            | 2 | .10000                | .18439 | .594  | -.2846 | .4846  |
|              | 4 | .00000                | .18439 | 1.000 | -.3846 | .3846  |
|              | 5 | .10000                | .18439 | .594  | -.2846 | .4846  |
|              | 1 | .40000 <sup>ac</sup>  | .18439 | .042  | .0154  | .7846  |
| 4            | 2 | .10000                | .18439 | .594  | -.2846 | .4846  |
|              | 3 | .00000                | .18439 | 1.000 | -.3846 | .3846  |
|              | 5 | .10000                | .18439 | .594  | -.2846 | .4846  |
|              | 1 | .30000                | .18439 | .119  | -.0846 | .6846  |
| 5            | 2 | .00000                | .18439 | 1.000 | -.3846 | .3846  |
|              | 3 | -.10000               | .18439 | .594  | -.4846 | .2846  |
|              | 4 | -.10000               | .18439 | .594  | -.4846 | .2846  |
| menit ke-030 | 2 | .50000 <sup>ac</sup>  | .16733 | .007  | .1510  | .8490  |
|              | 3 | .40000 <sup>ac</sup>  | .16733 | .027  | .0510  | .7490  |
| 1            | 4 | .40000 <sup>ac</sup>  | .16733 | .027  | .0510  | .7490  |
|              | 5 | .50000 <sup>ac</sup>  | .16733 | .007  | .1510  | .8490  |
|              | 1 | -.50000 <sup>ac</sup> | .16733 | .007  | -.8490 | -.1510 |
| 2            | 3 | -.10000               | .16733 | .557  | -.4490 | .2490  |
|              | 4 | -.10000               | .16733 | .557  | -.4490 | .2490  |
|              | 5 | .00000                | .16733 | 1.000 | -.3490 | .3490  |
|              | 1 | -.40000 <sup>ac</sup> | .16733 | .027  | -.7490 | -.0510 |
| 3            | 2 | .10000                | .16733 | .557  | -.2490 | .4490  |
|              | 4 | .00000                | .16733 | 1.000 | -.3490 | .3490  |
|              | 5 | .10000                | .16733 | .557  | -.2490 | .4490  |
|              | 1 | -.40000 <sup>ac</sup> | .16733 | .027  | -.7490 | -.0510 |
| 4            | 2 | .10000                | .16733 | .557  | -.2490 | .4490  |
|              | 3 | .00000                | .16733 | 1.000 | -.3490 | .3490  |
|              | 5 | .10000                | .16733 | .557  | -.2490 | .4490  |
|              | 1 | -.50000 <sup>ac</sup> | .16733 | .007  | -.8490 | -.1510 |
| 5            | 2 | .00000                | .16733 | 1.000 | -.3490 | .3490  |

|              |   |   |                        |        |       |         |         |
|--------------|---|---|------------------------|--------|-------|---------|---------|
|              |   | 3 | -.10000                | .16733 | .557  | -.4490  | .2490   |
|              |   | 4 | -.10000                | .16733 | .557  | -.4490  | .2490   |
| menit ke-060 |   | 2 | 1.10000 <sup>st</sup>  | .17889 | .000  | .7269   | 1.4731  |
|              | 1 | 3 | .90000 <sup>st</sup>   | .17889 | .000  | .5269   | 1.2731  |
|              |   | 4 | .90000 <sup>st</sup>   | .17889 | .000  | .5269   | 1.2731  |
|              |   | 5 | 1.00000 <sup>st</sup>  | .17889 | .000  | .6269   | 1.3731  |
|              | 2 | 1 | -1.10000 <sup>st</sup> | .17889 | .000  | -1.4731 | -.7269  |
|              |   | 3 | -.20000                | .17889 | .277  | -.5731  | .1731   |
|              |   | 4 | -.20000                | .17889 | .277  | -.5731  | .1731   |
|              |   | 5 | -.10000                | .17889 | .582  | -.4731  | .2731   |
|              | 3 | 1 | -.90000 <sup>st</sup>  | .17889 | .000  | -1.2731 | -.5269  |
|              |   | 2 | .20000                 | .17889 | .277  | -.1731  | .5731   |
|              |   | 4 | .00000                 | .17889 | 1.000 | -.3731  | .3731   |
|              |   | 5 | .10000                 | .17889 | .582  | -.2731  | .4731   |
|              | 4 | 1 | -.90000 <sup>st</sup>  | .17889 | .000  | -1.2731 | -.5269  |
|              |   | 2 | .20000                 | .17889 | .277  | -.1731  | .5731   |
|              |   | 3 | .00000                 | .17889 | 1.000 | -.3731  | .3731   |
|              |   | 5 | .10000                 | .17889 | .582  | -.2731  | .4731   |
|              | 5 | 1 | -1.00000 <sup>st</sup> | .17889 | .000  | -1.3731 | -.6269  |
|              |   | 2 | .10000                 | .17889 | .582  | -.2731  | .4731   |
|              |   | 3 | -.10000                | .17889 | .582  | -.4731  | .2731   |
|              |   | 4 | -.10000                | .17889 | .582  | -.4731  | .2731   |
| menit ke-090 |   | 2 | 1.10000 <sup>st</sup>  | .17889 | .000  | .7269   | 1.4731  |
|              | 1 | 3 | 1.00000 <sup>st</sup>  | .17889 | .000  | .6269   | 1.3731  |
|              |   | 4 | 1.40000 <sup>st</sup>  | .17889 | .000  | 1.0269  | 1.7731  |
|              |   | 5 | 1.40000 <sup>st</sup>  | .17889 | .000  | 1.0269  | 1.7731  |
|              | 2 | 1 | -1.10000 <sup>st</sup> | .17889 | .000  | -1.4731 | -.7269  |
|              |   | 3 | -.10000                | .17889 | .582  | -.4731  | .2731   |
|              |   | 4 | .30000                 | .17889 | .109  | -.0731  | .6731   |
|              |   | 5 | .30000                 | .17889 | .109  | -.0731  | .6731   |
|              | 3 | 1 | -1.00000 <sup>st</sup> | .17889 | .000  | -1.3731 | -.6269  |
|              |   | 2 | .10000                 | .17889 | .582  | -.2731  | .4731   |
|              |   | 4 | .40000 <sup>st</sup>   | .17889 | .037  | .0269   | .7731   |
|              |   | 5 | .40000 <sup>st</sup>   | .17889 | .037  | .0269   | .7731   |
|              | 4 | 1 | -1.40000 <sup>st</sup> | .17889 | .000  | -1.7731 | -1.0269 |

|               |   |                        |        |       |         |         |
|---------------|---|------------------------|--------|-------|---------|---------|
|               | 2 | -.30000                | .17889 | .109  | -.6731  | .0731   |
|               | 3 | -.40000 <sup>st</sup>  | .17889 | .037  | -.7731  | -.0269  |
|               | 5 | .00000                 | .17889 | 1.000 | -.3731  | .3731   |
|               | 1 | -1.40000 <sup>st</sup> | .17889 | .000  | -1.7731 | -1.0269 |
| 5             | 2 | -.30000                | .17889 | .109  | -.6731  | .0731   |
|               | 3 | -.40000 <sup>st</sup>  | .17889 | .037  | -.7731  | -.0269  |
|               | 4 | .00000                 | .17889 | 1.000 | -.3731  | .3731   |
| <hr/>         |   |                        |        |       |         |         |
| menit ke-0120 | 2 | 1.70000 <sup>st</sup>  | .18439 | .000  | 1.3154  | 2.0846  |
|               | 3 | 1.20000 <sup>st</sup>  | .18439 | .000  | .8154   | 1.5846  |
| 1             | 4 | 2.10000 <sup>st</sup>  | .18439 | .000  | 1.7154  | 2.4846  |
|               | 5 | 2.10000 <sup>st</sup>  | .18439 | .000  | 1.7154  | 2.4846  |
|               | 1 | -1.70000 <sup>st</sup> | .18439 | .000  | -2.0846 | -1.3154 |
| 2             | 3 | -.50000 <sup>st</sup>  | .18439 | .013  | -.8846  | -.1154  |
|               | 4 | .40000 <sup>st</sup>   | .18439 | .042  | .0154   | .7846   |
|               | 5 | .40000 <sup>st</sup>   | .18439 | .042  | .0154   | .7846   |
|               | 1 | -1.20000 <sup>st</sup> | .18439 | .000  | -1.5846 | -.8154  |
| 3             | 2 | .50000 <sup>st</sup>   | .18439 | .013  | .1154   | .8846   |
|               | 4 | .90000 <sup>st</sup>   | .18439 | .000  | .5154   | 1.2846  |
|               | 5 | .90000 <sup>st</sup>   | .18439 | .000  | .5154   | 1.2846  |
|               | 1 | -2.10000 <sup>st</sup> | .18439 | .000  | -2.4846 | -1.7154 |
| 4             | 2 | -.40000 <sup>st</sup>  | .18439 | .042  | -.7846  | -.0154  |
|               | 3 | -.90000 <sup>st</sup>  | .18439 | .000  | -1.2846 | -.5154  |
|               | 5 | .00000                 | .18439 | 1.000 | -.3846  | .3846   |
|               | 1 | -2.10000 <sup>st</sup> | .18439 | .000  | -2.4846 | -1.7154 |
| 5             | 2 | -.40000 <sup>st</sup>  | .18439 | .042  | -.7846  | -.0154  |
|               | 3 | -.90000 <sup>st</sup>  | .18439 | .000  | -1.2846 | -.5154  |
|               | 4 | .00000                 | .18439 | 1.000 | -.3846  | .3846   |
| <hr/>         |   |                        |        |       |         |         |
| menit ke-0150 | 2 | 1.70000 <sup>st</sup>  | .18439 | .000  | 1.3154  | 2.0846  |
|               | 3 | 1.70000 <sup>st</sup>  | .18439 | .000  | 1.3154  | 2.0846  |
| 1             | 4 | 2.10000 <sup>st</sup>  | .18439 | .000  | 1.7154  | 2.4846  |
|               | 5 | 2.10000 <sup>st</sup>  | .18439 | .000  | 1.7154  | 2.4846  |
|               | 1 | -1.70000 <sup>st</sup> | .18439 | .000  | -2.0846 | -1.3154 |
| 2             | 3 | .00000                 | .18439 | 1.000 | -.3846  | .3846   |
|               | 4 | .40000 <sup>st</sup>   | .18439 | .042  | .0154   | .7846   |
|               | 5 | .40000 <sup>st</sup>   | .18439 | .042  | .0154   | .7846   |

|              |   |                        |        |       |         |         |
|--------------|---|------------------------|--------|-------|---------|---------|
| 3            | 1 | -1.70000 <sup>st</sup> | .18439 | .000  | -2.0846 | -1.3154 |
|              | 2 | .00000                 | .18439 | 1.000 | -.3846  | .3846   |
|              | 4 | .40000 <sup>st</sup>   | .18439 | .042  | .0154   | .7846   |
|              | 5 | .40000 <sup>st</sup>   | .18439 | .042  | .0154   | .7846   |
| 4            | 1 | -2.10000 <sup>st</sup> | .18439 | .000  | -2.4846 | -1.7154 |
|              | 2 | -.40000 <sup>st</sup>  | .18439 | .042  | -.7846  | -.0154  |
|              | 3 | -.40000 <sup>st</sup>  | .18439 | .042  | -.7846  | -.0154  |
|              | 5 | .00000                 | .18439 | 1.000 | -.3846  | .3846   |
| 5            | 1 | -2.10000 <sup>st</sup> | .18439 | .000  | -2.4846 | -1.7154 |
|              | 2 | -.40000 <sup>st</sup>  | .18439 | .042  | -.7846  | -.0154  |
|              | 3 | -.40000 <sup>st</sup>  | .18439 | .042  | -.7846  | -.0154  |
|              | 4 | .00000                 | .18439 | 1.000 | -.3846  | .3846   |
| menit ke-180 |   |                        |        |       |         |         |
| 1            | 2 | 2.70000 <sup>st</sup>  | .07746 | .000  | 2.5384  | 2.8616  |
|              | 3 | 2.20000 <sup>st</sup>  | .07746 | .000  | 2.0384  | 2.3616  |
|              | 4 | 2.70000 <sup>st</sup>  | .07746 | .000  | 2.5384  | 2.8616  |
|              | 5 | 2.70000 <sup>st</sup>  | .07746 | .000  | 2.5384  | 2.8616  |
| 2            | 1 | -2.70000 <sup>st</sup> | .07746 | .000  | -2.8616 | -2.5384 |
|              | 3 | -.50000 <sup>st</sup>  | .07746 | .000  | -.6616  | -.3384  |
|              | 4 | .00000                 | .07746 | 1.000 | -.1616  | .1616   |
|              | 5 | .00000                 | .07746 | 1.000 | -.1616  | .1616   |
| 3            | 1 | -2.20000 <sup>st</sup> | .07746 | .000  | -2.3616 | -2.0384 |
|              | 2 | .50000 <sup>st</sup>   | .07746 | .000  | .3384   | .6616   |
|              | 4 | .50000 <sup>st</sup>   | .07746 | .000  | .3384   | .6616   |
|              | 5 | .50000 <sup>st</sup>   | .07746 | .000  | .3384   | .6616   |
| 4            | 1 | -2.70000 <sup>st</sup> | .07746 | .000  | -2.8616 | -2.5384 |
|              | 2 | .00000                 | .07746 | 1.000 | -.1616  | .1616   |
|              | 3 | -.50000 <sup>st</sup>  | .07746 | .000  | -.6616  | -.3384  |
|              | 5 | .00000                 | .07746 | 1.000 | -.1616  | .1616   |
| 5            | 1 | -2.70000 <sup>st</sup> | .07746 | .000  | -2.8616 | -2.5384 |
|              | 2 | .00000                 | .07746 | 1.000 | -.1616  | .1616   |
|              | 3 | -.50000 <sup>st</sup>  | .07746 | .000  | -.6616  | -.3384  |
|              | 4 | .00000                 | .07746 | 1.000 | -.1616  | .1616   |

\*. The mean difference is significant at the 0.05 level.

## LAMPIRAN C

### HASIL UJI HSD ANTARA KELOMPOK SENYAWA UJI ASAM O-(4-METOKSIBENZOIL) SALISILAT, SENYAWA PEMBANDING ASETOSAL, DAN KONTROL PGA 3%

Data perhitungan statistik Antiinflamasi :

Perhitungan Anava dan HSD 5% Asam O-(4-metoksibenzoil) salisilat pada menit ke-0, menit ke-30, 60, 90, 120, 150, dan 180

| ANOVA        |                |                |    |             |          |       |
|--------------|----------------|----------------|----|-------------|----------|-------|
|              |                | Sum of Squares | df | Mean Square | F        | Sig.  |
| menit ke-0   | Between Groups | .000           | 4  | .000        | .000     | 1.000 |
|              | Within Groups  | .000           | 20 | .000        |          |       |
|              | Total          | .000           | 24 |             |          |       |
| menit ke-30  | Between Groups | .000           | 4  | .000        | .000     | 1.000 |
|              | Within Groups  | .000           | 20 | .000        |          |       |
|              | Total          | .000           | 24 |             |          |       |
| menit ke-60  | Between Groups | .000           | 4  | .000        | .000     | 1.000 |
|              | Within Groups  | .000           | 20 | .000        |          |       |
|              | Total          | .000           | 24 |             |          |       |
| menit ke-90  | Between Groups | 6.350          | 4  | 1.588       | 1.930E33 | .000  |
|              | Within Groups  | .000           | 20 | .000        |          |       |
|              | Total          | 6.350          | 24 |             |          |       |
| menit ke-120 | Between Groups | 3.969          | 4  | .992        | 3.016E32 | .000  |
|              | Within Groups  | .000           | 20 | .000        |          |       |
|              | Total          | 3.969          | 24 |             |          |       |
| menit ke-150 | Between Groups | 5.557          | 4  | 1.389       | 4.222E32 | .000  |
|              | Within Groups  | .000           | 20 | .000        |          |       |
|              | Total          | 5.557          | 24 |             |          |       |
| menit ke-180 | Between Groups | 3.969          | 4  | .992        | 3.016E32 | .000  |
|              | Within Groups  | .000           | 20 | .000        |          |       |
|              | Total          | 3.969          | 24 |             |          |       |
| menit ke-210 | Between Groups | 2.381          | 4  | .595        | 3.619E32 | .000  |
|              | Within Groups  | .000           | 20 | .000        |          |       |
|              | Total          | 2.381          | 24 |             |          |       |
| menit ke-240 | Between Groups | 1.588          | 4  | .397        | 4.825E32 | .000  |
|              | Within Groups  | .000           | 20 | .000        |          |       |
|              | Total          | 1.588          | 24 |             |          |       |

| Dependent Variable | (I) kelompok | (J) kelompok | Mean Difference (I-J) | Std. Error | Sig.  | 95% Confidence Interval |             |
|--------------------|--------------|--------------|-----------------------|------------|-------|-------------------------|-------------|
|                    |              |              |                       |            |       | Lower Bound             | Upper Bound |
| menit ke-0         | kontrol      | dosis 30     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 45     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 60     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | pembanding   | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    | dosis 30     | kontrol      | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 45     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 60     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | pembanding   | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    | dosis 45     | kontrol      | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 30     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 60     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | pembanding   | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    | dosis 60     | kontrol      | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 30     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 45     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | pembanding   | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    | pembanding   | kontrol      | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 30     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 45     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 60     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
| menit ke-30        | kontrol      | dosis 30     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 45     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 60     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | pembanding   | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    | dosis 30     | kontrol      | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 45     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | dosis 60     | .00000                | .00000     | 1.000 | .0000                   | .0000       |
|                    |              | pembanding   | .00000                | .00000     | 1.000 | .0000                   | .0000       |

|             |            |            |           |        |       |         |         |
|-------------|------------|------------|-----------|--------|-------|---------|---------|
|             | dosis 45   | kontrol    | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 30   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 60   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | pembanding | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             | dosis 60   | kontrol    | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 30   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 45   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | pembanding | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             | pembanding | kontrol    | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 30   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 45   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 60   | .00000    | .00000 | 1.000 | .0000   | .0000   |
| menit ke-90 | kontrol    | dosis 30   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 45   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 60   | 1.26000*  | .00000 | .000  | 1.2600  | 1.2600  |
|             |            | pembanding | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             | dosis 30   | kontrol    | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 45   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 60   | 1.26000*  | .00000 | .000  | 1.2600  | 1.2600  |
|             |            | pembanding | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             | dosis 45   | kontrol    | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 30   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 60   | 1.26000*  | .00000 | .000  | 1.2600  | 1.2600  |
|             |            | pembanding | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             | dosis 60   | kontrol    | -1.26000* | .00000 | .000  | -1.2600 | -1.2600 |
|             |            | dosis 30   | -1.26000* | .00000 | .000  | -1.2600 | -1.2600 |
|             |            | dosis 45   | -1.26000* | .00000 | .000  | -1.2600 | -1.2600 |
|             |            | pembanding | -1.26000* | .00000 | .000  | -1.2600 | -1.2600 |
|             | pembanding | kontrol    | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 30   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 45   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|             |            | dosis 60   | 1.26000*  | .00000 | .000  | 1.2600  | 1.2600  |
| menit       | kontrol    | dosis 30   | .63000*   | .00000 | .000  | .6300   | .6300   |

|              |             |            |           |        |       |         |         |
|--------------|-------------|------------|-----------|--------|-------|---------|---------|
| ke-120       |             | dosis 45   | .63000*   | .00000 | .000  | .6300   | .6300   |
|              |             | dosis 60   | 1.26000*  | .00000 | .000  | 1.2600  | 1.2600  |
|              |             | pembanding | .63000*   | .00000 | .000  | .6300   | .6300   |
|              | dosis 30    | kontrol    | -.63000*  | .00000 | .000  | -.6300  | -.6300  |
|              |             | dosis 45   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|              |             | dosis 60   | .63000*   | .00000 | .000  | .6300   | .6300   |
|              |             | pembanding | .00000    | .00000 | 1.000 | .0000   | .0000   |
|              |             | kontrol    | -.63000*  | .00000 | .000  | -.6300  | -.6300  |
|              | dosis 45    | dosis 30   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|              |             | dosis 60   | .63000*   | .00000 | .000  | .6300   | .6300   |
|              |             | pembanding | .00000    | .00000 | 1.000 | .0000   | .0000   |
|              | dosis 60    | kontrol    | -1.26000* | .00000 | .000  | -1.2600 | -1.2600 |
|              |             | dosis 30   | -.63000*  | .00000 | .000  | -.6300  | -.6300  |
|              |             | dosis 45   | -.63000*  | .00000 | .000  | -.6300  | -.6300  |
|              | pemban ding | pembanding | -.63000*  | .00000 | .000  | -.6300  | -.6300  |
|              |             | kontrol    | -.63000*  | .00000 | .000  | -.6300  | -.6300  |
|              |             | dosis 30   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|              |             | dosis 45   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|              |             | dosis 60   | .63000*   | .00000 | .000  | .6300   | .6300   |
| menit ke-150 | kontrol     | dosis 30   | .00000    | .00000 | 1.000 | .0000   | .0000   |
|              |             | dosis 45   | .63000*   | .00000 | .000  | .6300   | .6300   |
|              |             | dosis 60   | 1.26000*  | .00000 | .000  | 1.2600  | 1.2600  |
|              |             | pembanding | .63000*   | .00000 | .000  | .6300   | .6300   |
|              | dosis 30    | kontrol    | .00000    | .00000 | 1.000 | .0000   | .0000   |
|              |             | dosis 45   | .63000*   | .00000 | .000  | .6300   | .6300   |
|              |             | dosis 60   | 1.26000*  | .00000 | .000  | 1.2600  | 1.2600  |
|              |             | pembanding | .63000*   | .00000 | .000  | .6300   | .6300   |
|              | dosis 45    | kontrol    | -.63000*  | .00000 | .000  | -.6300  | -.6300  |
|              |             | dosis 30   | -.63000*  | .00000 | .000  | -.6300  | -.6300  |
|              |             | dosis 60   | .63000*   | .00000 | .000  | .6300   | .6300   |
|              |             | pembanding | .00000    | .00000 | 1.000 | .0000   | .0000   |
|              | dosis 60    | kontrol    | -1.26000* | .00000 | .000  | -1.2600 | -1.2600 |
|              |             | dosis 30   | -1.26000* | .00000 | .000  | -1.2600 | -1.2600 |

|                 |                |            |          |        |       |        |        |
|-----------------|----------------|------------|----------|--------|-------|--------|--------|
|                 |                | dosis 45   | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|                 |                | pembanding | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|                 | pemban         | kontrol    | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|                 | ding           | dosis 30   | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|                 |                | dosis 45   | .00000   | .00000 | 1.000 | .0000  | .0000  |
|                 |                | dosis 60   | .63000*  | .00000 | .000  | .6300  | .6300  |
| menit<br>ke-180 | kontrol        | dosis 30   | .00000   | .00000 | 1.000 | .0000  | .0000  |
|                 |                | dosis 45   | .63000*  | .00000 | .000  | .6300  | .6300  |
|                 |                | dosis 60   | .63000*  | .00000 | .000  | .6300  | .6300  |
|                 |                | pembanding | .63000*  | .00000 | .000  | .6300  | .6300  |
|                 | dosis<br>30    | kontrol    | .00000   | .00000 | 1.000 | .0000  | .0000  |
|                 |                | dosis 45   | .63000*  | .00000 | .000  | .6300  | .6300  |
|                 |                | dosis 60   | .63000*  | .00000 | .000  | .6300  | .6300  |
|                 |                | pembanding | .63000*  | .00000 | .000  | .6300  | .6300  |
|                 | dosis<br>45    | kontrol    | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|                 |                | dosis 30   | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|                 |                | dosis 60   | .00000   | .00000 | 1.000 | .0000  | .0000  |
|                 |                | pembanding | .00000   | .00000 | 1.000 | .0000  | .0000  |
|                 | dosis<br>60    | kontrol    | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|                 |                | dosis 30   | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|                 |                | dosis 45   | .00000   | .00000 | 1.000 | .0000  | .0000  |
|                 |                | pembanding | .00000   | .00000 | 1.000 | .0000  | .0000  |
|                 | pemban<br>ding | kontrol    | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|                 |                | dosis 30   | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|                 |                | dosis 45   | .00000   | .00000 | 1.000 | .0000  | .0000  |
|                 |                | dosis 60   | .00000   | .00000 | 1.000 | .0000  | .0000  |
| menit<br>ke-210 | kontrol        | dosis 30   | .63000*  | .00000 | .000  | .6300  | .6300  |
|                 |                | dosis 45   | .63000*  | .00000 | .000  | .6300  | .6300  |
|                 |                | dosis 60   | .63000*  | .00000 | .000  | .6300  | .6300  |
|                 |                | pembanding | .63000*  | .00000 | .000  | .6300  | .6300  |
|                 | dosis<br>30    | kontrol    | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|                 |                | dosis 45   | .00000   | .00000 | 1.000 | .0000  | .0000  |
|                 |                | dosis 60   | .00000   | .00000 | 1.000 | .0000  | .0000  |

|            |            |          |        |       |        |        |
|------------|------------|----------|--------|-------|--------|--------|
|            | pembanding | .00000   | .00000 | 1.000 | .0000  | .0000  |
| dosis 45   | kontrol    | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|            | dosis 30   | .00000   | .00000 | 1.000 | .0000  | .0000  |
|            | dosis 60   | .00000   | .00000 | 1.000 | .0000  | .0000  |
|            | pembanding | .00000   | .00000 | 1.000 | .0000  | .0000  |
| dosis 60   | kontrol    | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|            | dosis 30   | .00000   | .00000 | 1.000 | .0000  | .0000  |
|            | dosis 45   | .00000   | .00000 | 1.000 | .0000  | .0000  |
|            | pembanding | .00000   | .00000 | 1.000 | .0000  | .0000  |
| pembanding | kontrol    | -.63000* | .00000 | .000  | -.6300 | -.6300 |
|            | dosis 30   | .00000   | .00000 | 1.000 | .0000  | .0000  |
|            | dosis 45   | .00000   | .00000 | 1.000 | .0000  | .0000  |
|            | dosis 60   | .00000   | .00000 | 1.000 | .0000  | .0000  |

\*. The mean difference is significant at the 0.05 level.

## LAMPIRAN D

### TABEL UJI F

Baris pertama pada setiap pasangan baris adalah titik pada distribusi  $F$  untuk aras 0.05; baris kedua untuk aras 0.01.

|                                                          |    | Derajat kebebasan untuk rataan kuadrat yang lebih besar |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |  |  |
|----------------------------------------------------------|----|---------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--|--|
|                                                          |    | 1                                                       | 2            | 3            | 4            | 5            | 6            | 7            | 8            | 9            | 10           | 11           | 12           | 14           | 16           | 20           | 24           | 30           | 40           | 50           | 75           | 100          | 200          | 500          | ∞            |  |  |
| Derajat kebebasan untuk rataan kuadrat yang lebih kecil. | 16 | 4.49<br>8.53                                            | 3.63<br>6.23 | 3.24<br>5.29 | 3.01<br>4.77 | 2.85<br>4.44 | 2.74<br>4.20 | 2.66<br>4.03 | 2.59<br>3.89 | 2.54<br>3.76 | 2.49<br>3.69 | 2.45<br>3.61 | 2.42<br>3.55 | 2.37<br>3.45 | 2.33<br>3.37 | 2.28<br>3.25 | 2.24<br>3.18 | 2.20<br>3.10 | 2.16<br>3.01 | 2.13<br>2.96 | 2.09<br>2.89 | 2.07<br>2.86 | 2.04<br>2.80 | 2.02<br>2.77 | 2.01<br>2.75 |  |  |
|                                                          | 17 | 4.45<br>8.40                                            | 3.59<br>6.11 | 3.20<br>5.18 | 2.96<br>4.67 | 2.81<br>4.34 | 2.70<br>4.10 | 2.62<br>3.93 | 2.55<br>3.79 | 2.50<br>3.68 | 2.45<br>3.59 | 2.41<br>3.52 | 2.38<br>3.45 | 2.33<br>3.35 | 2.29<br>3.27 | 2.23<br>3.16 | 2.19<br>3.08 | 2.15<br>3.00 | 2.11<br>2.92 | 2.08<br>2.86 | 2.04<br>2.79 | 2.02<br>2.76 | 1.99<br>2.70 | 1.97<br>2.67 | 1.96<br>2.65 |  |  |
|                                                          | 18 | 4.41<br>8.28                                            | 3.55<br>6.01 | 3.16<br>5.09 | 2.93<br>4.58 | 2.77<br>4.25 | 2.66<br>4.01 | 2.58<br>3.85 | 2.51<br>3.71 | 2.46<br>3.60 | 2.41<br>3.51 | 2.37<br>3.44 | 2.34<br>3.37 | 2.29<br>3.27 | 2.25<br>3.19 | 2.19<br>3.07 | 2.15<br>3.00 | 2.11<br>2.91 | 2.07<br>2.83 | 2.04<br>2.78 | 2.00<br>2.71 | 1.98<br>2.68 | 1.95<br>2.62 | 1.93<br>2.59 | 1.92<br>2.57 |  |  |
|                                                          | 19 | 4.38<br>8.18                                            | 3.52<br>5.93 | 3.13<br>5.01 | 2.90<br>4.50 | 2.74<br>4.17 | 2.63<br>3.94 | 2.55<br>3.77 | 2.48<br>3.63 | 2.43<br>3.52 | 2.38<br>3.43 | 2.34<br>3.36 | 2.31<br>3.30 | 2.26<br>3.19 | 2.21<br>3.12 | 2.15<br>3.00 | 2.11<br>2.92 | 2.07<br>2.84 | 2.02<br>2.76 | 2.00<br>2.70 | 1.96<br>2.63 | 1.94<br>2.60 | 1.91<br>2.54 | 1.90<br>2.51 | 1.88<br>2.49 |  |  |
|                                                          | 20 | 4.35<br>8.10                                            | 3.49<br>5.85 | 3.10<br>4.94 | 2.87<br>4.43 | 2.71<br>4.10 | 2.60<br>3.87 | 2.52<br>3.71 | 2.45<br>3.56 | 2.40<br>3.45 | 2.35<br>3.37 | 2.31<br>3.30 | 2.28<br>3.23 | 2.23<br>3.13 | 2.18<br>3.05 | 2.12<br>2.94 | 2.08<br>2.86 | 2.04<br>2.77 | 1.99<br>2.69 | 1.96<br>2.56 | 1.92<br>2.53 | 1.90<br>2.47 | 1.87<br>2.44 | 1.85<br>2.42 | 1.84<br>2.42 |  |  |
|                                                          | 21 | 4.32<br>8.02                                            | 3.47<br>5.78 | 3.07<br>4.87 | 2.84<br>4.37 | 2.68<br>4.04 | 2.57<br>3.81 | 2.49<br>3.65 | 2.42<br>3.51 | 2.37<br>3.40 | 2.32<br>3.31 | 2.28<br>3.24 | 2.25<br>3.17 | 2.20<br>3.07 | 2.15<br>2.99 | 2.09<br>2.88 | 2.05<br>2.80 | 2.00<br>2.72 | 1.96<br>2.63 | 1.93<br>2.58 | 1.90<br>2.51 | 1.87<br>2.47 | 1.84<br>2.42 | 1.82<br>2.38 | 1.81<br>2.36 |  |  |
|                                                          | 22 | 4.30<br>7.94                                            | 3.44<br>5.72 | 3.05<br>4.82 | 2.82<br>4.31 | 2.66<br>3.99 | 2.55<br>3.76 | 2.47<br>3.59 | 2.40<br>3.45 | 2.35<br>3.35 | 2.30<br>3.26 | 2.26<br>3.18 | 2.23<br>3.12 | 2.18<br>3.02 | 2.13<br>2.94 | 2.07<br>2.83 | 2.03<br>2.75 | 1.98<br>2.67 | 1.93<br>2.58 | 1.91<br>2.53 | 1.87<br>2.46 | 1.84<br>2.42 | 1.81<br>2.37 | 1.80<br>2.33 | 1.78<br>2.31 |  |  |
|                                                          | 23 | 4.28<br>7.88                                            | 3.42<br>5.66 | 3.03<br>4.76 | 2.80<br>4.26 | 2.64<br>3.94 | 2.53<br>3.71 | 2.45<br>3.54 | 2.38<br>3.41 | 2.32<br>3.30 | 2.28<br>3.21 | 2.24<br>3.14 | 2.20<br>3.07 | 2.14<br>2.97 | 2.10<br>2.89 | 2.04<br>2.78 | 2.00<br>2.70 | 1.96<br>2.62 | 1.91<br>2.53 | 1.88<br>2.48 | 1.84<br>2.41 | 1.82<br>2.37 | 1.79<br>2.32 | 1.77<br>2.28 | 1.76<br>2.26 |  |  |
|                                                          | 24 | 4.26<br>7.82                                            | 3.40<br>5.61 | 3.01<br>4.72 | 2.78<br>4.22 | 2.62<br>3.90 | 2.51<br>3.67 | 2.43<br>3.50 | 2.36<br>3.36 | 2.30<br>3.25 | 2.26<br>3.17 | 2.22<br>3.09 | 2.18<br>3.03 | 2.13<br>2.93 | 2.09<br>2.85 | 2.02<br>2.74 | 1.98<br>2.66 | 1.94<br>2.58 | 1.89<br>2.49 | 1.86<br>2.44 | 1.82<br>2.36 | 1.80<br>2.33 | 1.76<br>2.27 | 1.74<br>2.23 | 1.73<br>2.21 |  |  |
|                                                          | 25 | 4.24<br>7.77                                            | 3.38<br>5.57 | 2.99<br>4.68 | 2.76<br>4.18 | 2.60<br>3.86 | 2.49<br>3.63 | 2.41<br>3.46 | 2.34<br>3.32 | 2.28<br>3.21 | 2.24<br>3.13 | 2.20<br>3.05 | 2.16<br>2.99 | 2.11<br>2.89 | 2.06<br>2.81 | 2.00<br>2.70 | 1.96<br>2.62 | 1.92<br>2.54 | 1.87<br>2.45 | 1.84<br>2.40 | 1.80<br>2.32 | 1.77<br>2.29 | 1.74<br>2.23 | 1.72<br>2.19 | 1.71<br>2.17 |  |  |
|                                                          | 26 | 4.22<br>7.72                                            | 3.37<br>5.53 | 2.89<br>4.64 | 2.74<br>4.14 | 2.59<br>3.82 | 2.47<br>3.59 | 2.42<br>3.42 | 2.32<br>3.29 | 2.27<br>3.17 | 2.22<br>3.09 | 2.18<br>3.02 | 2.15<br>2.96 | 2.10<br>2.86 | 2.05<br>2.77 | 1.99<br>2.66 | 1.95<br>2.58 | 1.90<br>2.50 | 1.85<br>2.41 | 1.82<br>2.36 | 1.78<br>2.28 | 1.76<br>2.25 | 1.72<br>2.19 | 1.70<br>2.15 | 1.69<br>2.13 |  |  |
|                                                          | 27 | 4.21<br>7.68                                            | 3.35<br>5.49 | 2.96<br>4.60 | 2.73<br>4.11 | 2.57<br>3.79 | 2.46<br>3.56 | 2.37<br>3.39 | 2.30<br>3.26 | 2.25<br>3.14 | 2.20<br>3.06 | 2.16<br>2.98 | 2.13<br>2.93 | 2.08<br>2.83 | 2.03<br>2.74 | 1.97<br>2.63 | 1.93<br>2.55 | 1.88<br>2.47 | 1.84<br>2.38 | 1.80<br>2.33 | 1.76<br>2.25 | 1.74<br>2.21 | 1.71<br>2.16 | 1.68<br>2.12 | 1.67<br>2.10 |  |  |
|                                                          | 28 | 4.20<br>7.64                                            | 3.34<br>5.45 | 2.95<br>4.57 | 2.71<br>4.07 | 2.56<br>3.76 | 2.44<br>3.53 | 2.36<br>3.36 | 2.29<br>3.23 | 2.24<br>3.11 | 2.19<br>3.03 | 2.15<br>2.95 | 2.12<br>2.90 | 2.06<br>2.80 | 2.02<br>2.71 | 1.96<br>2.60 | 1.91<br>2.52 | 1.87<br>2.44 | 1.81<br>2.35 | 1.78<br>2.30 | 1.75<br>2.22 | 1.72<br>2.18 | 1.69<br>2.13 | 1.67<br>2.09 | 1.65<br>2.06 |  |  |
|                                                          | 29 | 4.18<br>7.60                                            | 3.33<br>5.52 | 2.93<br>4.54 | 2.70<br>4.04 | 2.54<br>3.73 | 2.43<br>3.50 | 2.35<br>3.32 | 2.28<br>3.20 | 2.22<br>3.08 | 2.18<br>3.00 | 2.14<br>2.92 | 2.10<br>2.87 | 2.05<br>2.77 | 2.00<br>2.68 | 1.94<br>2.57 | 1.90<br>2.49 | 1.85<br>2.41 | 1.80<br>2.32 | 1.77<br>2.27 | 1.73<br>2.19 | 1.71<br>2.15 | 1.68<br>2.10 | 1.65<br>2.06 | 1.64<br>2.03 |  |  |
|                                                          | 30 | 4.17<br>7.56                                            | 3.32<br>5.39 | 2.92<br>4.51 | 2.69<br>4.02 | 2.53<br>3.70 | 2.42<br>3.47 | 2.34<br>3.30 | 2.27<br>3.17 | 2.21<br>3.06 | 2.16<br>2.98 | 2.12<br>2.90 | 2.09<br>2.84 | 2.04<br>2.74 | 1.99<br>2.66 | 1.93<br>2.55 | 1.89<br>2.47 | 1.84<br>2.38 | 1.79<br>2.29 | 1.76<br>2.24 | 1.72<br>2.16 | 1.69<br>2.13 | 1.66<br>2.07 | 1.64<br>2.03 | 1.62<br>2.01 |  |  |

LAMPIRAN E  
TABEL UJI HSD (0,05)

| $\begin{matrix} k \\ \text{d. k.} \end{matrix}$ | 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 | 4.01 | 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.

LAMPIRAN F  
TABEL KORELASI ( r )

| DEGREES OF<br>FREEDOM (DF) | 5<br>PERCENT | 1<br>PERCENT | DEGREES OF<br>FREEDOM (DF) | 5<br>PERCENT | 1<br>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         |

# LAMPIRAN G

## SERTIFIKAT ASAM SALISILAT

06/05/26 17:21 Honeywell Specialty Chemicals Seelze GmbH (+49 5137 999 164) --> 6,00498965134167 p. 1/1



**SIGMA-ALDRICH**

Sigma-Aldrich Laborchemikalien GmbH D-30918 Seelze  
Telefon: +49 5137 8238-0

**Riedel de Haën**

**CERTIFICATE OF ANALYSIS /  
INSPECTION CERTIFICATE 3.1 acc. to DIN EN 10204**

Seelze, 26.05.2006/758895

Order-No.:  
Customer-No.:  
FAX-No.: 00498965134167  
Order-Code:

Order-Code 2: ph  
Quantity:

Production date: 23.Jul.1998  
rec. Retest Date: 31.Jul.2006

Article/Product: 27301

Batch : 82030

Salicylic acid puriss., meets analytical specification of Ph. Eur., BP, USP

The quality certificate is valid for the time of delivery

|                                      |             |    |
|--------------------------------------|-------------|----|
| assay (calc. to the dried substance) | 99.7        | %  |
| melting range                        | 159.7-160.4 | °C |
| loss on drying                       | 0.04        | %  |
| sulfated ash                         | < 0.05      | %  |
| heavy metals (as Pb)                 | < 0.001     | %  |
| chloride (Cl)                        | < 0.005     | %  |
| sulphate (SO <sub>4</sub> )          | < 0.02      | %  |
| identity                             | complying   |    |
| appearance of the solution           | complying   |    |
| related subst. (HPLC)                | < 0.2       | %  |
| residual solvents                    | complying   |    |

Identity, assay and impurities are complying to the monographs of the above mentioned pharmacopaeias/codices.

- \* The minimum shelf life is based on the current knowledge and holds only for proper storage conditions in the originally closed flasks/ packages.
- \* We herewith confirm that the delivery is effected according to the technical delivery conditions agreed.
- \* The batch from which we delivered, showed the above-mentioned values.
- \* Particular properties of the products or the suitability for a particular area of application are not assured.
- \* We guarantee a proper quality within our General Conditions of Sales.

Sigma-Aldrich Laborchemikalien GmbH  
Quality Assurance

(Dr. Gaebe)

**Works Inspector**

## LAMPIRAN H

### SERTIFIKAT SENYAWA UJI

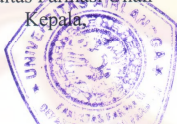
#### Laporan Hasil Pemeriksaan Senyawa

1. Nama senyawa : Asam *O*(4-metoksibenzoil)salisilat
2. Dibuat oleh : Siswandono
3. Tanggal dibuat : 11 Juni 2009
4. Rendemen : 68,9%
5. Hasil Pemeriksaan :

| No. | Jenis Pemeriksaan                              | Hasil Pemeriksaan                                                                        |
|-----|------------------------------------------------|------------------------------------------------------------------------------------------|
| 1.  | Pemerian/Organoleptis                          | Bentuk amorf, warna putih, tidak berbau                                                  |
| 2.  | Jarak lebur                                    | 120-122°C                                                                                |
| 3.  | Kelarutan                                      | metanol, etanol, dan aseton                                                              |
| 4.  | Uji KLT(3 eluen)                               | 1 noda.                                                                                  |
| 5.  | Identifikasi UV                                | $\lambda$ maks = 258 nm.                                                                 |
| 6.  | Identifikasi IR v (cm <sup>-1</sup> )          | 2944 (-O-H asam);<br>1730 (-C=O ester); 1701 (-C=O asam);<br>1606 & 1512 (-C-H aromatis) |
| 7.  | Identifikasi <sup>1</sup> H NMR $\delta$ (ppm) | 3,65, s, OCH <sub>3</sub> ; 6,82-7,79, m, (8H dari 2 gugus Ar-H);<br>12,40, s, COOH;     |
| 8.  | Kesimpulan :                                   | Senyawa adalah Asam <i>O</i> (4-metoksibenzoil)salisilat                                 |

Surabaya, 17 Januari 2010

Mengetahui:  
Bagian Kimia Farmasi  
Fakultas Farmasi Unair  
Kepala,



Dr. Djoko Agus Purwanto, Apt., M.S.  
NIP. 131 653 457

Ketua Peneliti,

*Siswandono*

Prof. Dr. Siswandono, Apt., MS.