BAB V

KESIMPULAN DAN SARAN

A. Kesimpulan

Kesimpulan dari hasil penelitian uji mutu fisik krim metil salisilat dengan variasi konsentrasi setil alkohol sebagai zat pengental, adalah :

1. Metil salisilat dapat dibuat krim dengan variasi konsentrasi setil alkohol 2%, 2,5%, dan 3% sebagai bahan pengental yang memenuhi syarat uji mutu fisik dan stabilitas krim.

2. Ketiga formula krim metil salisilat dengan variasi konsentrasi setil alkohol yang berbeda menunjukan bahwa ketiga formula memenuhi syarat uji mutu fisik dan stabilitas krim. Hasil uji mutu fisik untuk data daya sebar dari ketiga formula dengan konsentrasi setil alkohol yang berbeda menunjukan bahwa semakin kecil konsentrasi setil alkohol semakin besar daya sebarnya begitu juga sebaliknya semakin besar konsentrasi setil alkohol semakin kecil daya sebarnya, sedangkan untuk hasil viskositasnya berbanding terbalik dengan hasil data daya sebar dimana semakin kecil konsentrasi setil alkohol semakin kecil pula viskositasnya, begitu juga hasil daya lekat yang didapat menunjukan bahwa data hasil daya lekat berbanding lurus dengan hasil data viskositasnya.

B. Saran

1. Perlu dilakukan penelitian lebih lanjut mengenai uji mutu fisik dan stabilitas krim metil salisilat.

2. Perlu dilakukan penelitian lebih lanjut dalam penggunaan kombinasi bahan pengental yang berbeda.

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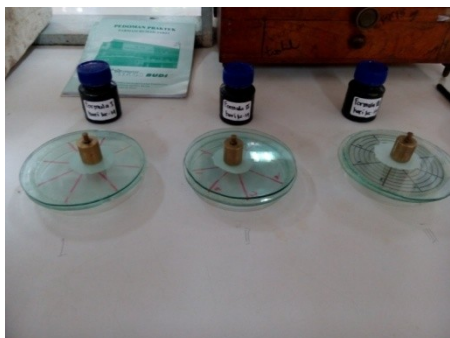
LAMPIRAN

Lampiran 1. Gambar hasil pengujian krim metil salisilat

Krim metil salisilat.

Uji homogenitas

Uji daya sebar

uji viskositas

Uji daya lekat

uji pH

Lampiran 2. Data daya sebar krim metil salisilat

minggu ke-1					
Formula	Beban	Replikasi			Rata-rata
		1	2	3	
F1	50	5,275	5,425	5,325	5,34
	100	5,675	5,625	5,75	5,68
	150	6,05	5,875	6,175	6,03
	200	6,55	6,275	6,55	6,46
	250	6,95	6,9	6,925	6,93
F2	50	5,1	5,225	5,175	5,17
	100	5,475	5,575	5,5	5,52
	150	5,85	5,95	5,95	5,92
	200	6,275	6,325	6,375	6,33
	250	6,7	7,2	6,8	6,90
F3	50	5	4,95	5,025	5,01
	100	5,45	5,425	5,15	5,34
	150	5,85	5,825	5,725	5,80
	200	6,3	6,175	6,125	6,20
	250	6,575	6,525	6,525	6,54

Analisis One Way Anova daya sebar minggu ke-1

```
NPAR TESTS
  /K-S(NORMAL)=formula dayasebar
  /STATISTICS DESCRIPTIVES
  /MISSING ANALYSIS.
```

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Formula	9	2,00	,866	1	3
daya sebar (cm)	9	5166,66667	160,565407	4950,000	5425,000

One-Sample Kolmogorov-Smirnov Test

		Formula	daya sebar (cm)
N		9	9
Normal Parameters[a,b]	Mean	2,00	5166,66667
	Std. Deviation	,866	160,565407
Most Extreme Differences	Absolute	,209	,145
	Positive	,209	,145
	Negative	-,209	-,089
Kolmogorov-Smirnov Z		,628	,434
Asymp. Sig. (2-tailed)		,826	,992

a. Test distribution is Normal.

b. Calculated from data.

```
ONEWAY dayasebar BY formula
  /STATISTICS DESCRIPTIVES HOMOGENEITY
  /MISSING ANALYSIS
  /POSTHOC=TUKEY ALPHA(0.05).
```

Oneway

Descriptives

daya sebar (cm)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
f1	3	5341,66667	76,376262	44,095855	5151,93751	5531,39582	5275,000	5425,000
f2	3	5166,66667	62,915287	36,324158	5010,37643	5322,95690	5100,000	5225,000
f3	3	4991,66667	38,188131	22,047928	4896,80209	5086,53124	4950,000	5025,000
Total	9	5166,66667	160,565407	53,521802	5043,24517	5290,08816	4950,000	5425,000

Test of Homogeneity of Variances

daya sebar (cm)

Levene Statistic	df1	df2	Sig.
,704	2	6	,531

ANOVA

daya sebar (cm)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	183750,000	2	91875,000	24,500	,001
Within Groups	22500,000	6	3750,000		
Total	206250,000	8			

Post Hoc Tests

Multiple Comparisons

daya sebar (cm)

Tukey HSD

(I) formula	(J) formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
f1	f2	175,000000*	50,000000	,030	21,58627	328,41373
	f3	350,000000*	50,000000	,001	196,58627	503,41373
f2	f1	-175,000000*	50,000000	,030	-328,41373	-21,58627
	f3	175,000000*	50,000000	,030	21,58627	328,41373
f3	f1	-350,000000*	50,000000	,001	-503,41373	-196,58627
	f2	-175,000000*	50,000000	,030	-328,41373	-21,58627

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

Homogeneous Subsets

daya sebar (cm)

Tukey HSD[a]

formula		Subset for alpha = 0.05		
	N	1	2	3
f3	3	4991,66667		
f2	3		5166,66667	
f1	3			5341,66667
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Minggu ke-2					
Formula	Beban	Replikasi			Rata-rata
		1	2	3	
F1	50	5,3	5,225	5,45	5,28
	100	5,65	5,675	5,75	5,69
	150	6,4	6,225	6,225	6,28
	200	6,95	6,75	6,65	6,78
	250	7,375	7,125	7,05	7,18
F2	50	5,15	5,2	5,175	5,18
	100	5,45	5,675	5,55	5,56
	150	5,85	5,875	5,9	5,88
	200	6,375	6,375	6,35	6,37
	250	6,8	6,8	6,775	6,79
F3	50	4,95	5,025	5	4,99
	100	5,2	5,425	5,4	5,34
	150	5,625	5,775	5,7	5,70
	200	6,3	6,325	6,175	6,27
	250	6,9	6,775	6,7	6,79

Minggu 3					
Formula	beban	Replikasi			Rata-rata
		1	2	3	
F1	50	5,475	5,4	5,275	5,35
	100	5,875	5,925	5,925	5,91
	150	6,3	6,4	6,275	6,33
	200	6,825	6,725	6,65	6,73
	250	7,15	7,15	7,075	7,13
F2	50	5,1	5,2	5,15	5,15
	100	5,45	5,5	5,575	5,51
	150	5,875	5,85	5,95	5,89
	200	6,175	6,225	6,475	6,29
	250	6,775	6,625	6,875	6,76
F3	50	5,05	5,025	4,95	5,01
	100	5,5	5,4	5,35	5,42
	150	5,675	5,95	5,725	5,78
	200	6,45	6,05	6,025	6,18
	250	6,625	6,325	6,425	6,46

Minggu 4					
Formula	Beban	Replikasi			Rata-rata
		1	2	3	
F1	50	5,325	5,325	4	4,88
	100	5,775	5,7	5,725	5,73
	150	6,2	6,075	6,15	6,14
	200	6,6	6,425	6,525	6,52
	250	6,95	6,85	7	6,93
F2	50	5,15	5,15	5,225	5,18
	100	5,5	5,475	5,625	5,53
	150	5,825	5,8	6	5,88
	200	6,175	6,15	6,375	6,23
	250	6,525	6,65	6,725	6,63
F3	50	4,95	4,95	5	5,03
	100	5,325	5,325	5,375	5,34
	150	5,725	5,8	5,675	5,73
	200	6,1	6,1	6,05	6,08
	250	6,425	6,45	6,475	6,45

Analisis One Way Anova daya sebar minggu ke-4

```
NPAR TESTS
  /K-S(NORMAL)=formula dayasebar
  /STATISTICS DESCRIPTIVES
  /MISSING ANALYSIS.
```

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Formula	9	2,00	,866	1	3
daya sebar (cm)	9	5161,11111	165,411944	4950,000	5375,000

One-Sample Kolmogorov-Smirnov Test

		Formula	daya sebar (cm)
N		9	9
Normal Parameters[a,b]	Mean	2,00	5161,11111
	Std. Deviation	,866	165,411944
Most Extreme Differences	Absolute	,209	,172
	Positive	,209	,168
	Negative	-,209	-,172
Kolmogorov-Smirnov Z		,628	,517
Asymp. Sig. (2-tailed)		,826	,952

a. Test distribution is Normal.

b. Calculated from data.

```
ONEWAY dayasebar BY formula
  /STATISTICS DESCRIPTIVES HOMOGENEITY
  /MISSING ANALYSIS
  /POSTHOC=TUKEY ALPHA(0.05).
```

Oneway

Descriptives

daya sebar (cm)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
f1	3	5341,66667	28,867513	16,66667	5269,95579	5413,37755	5325,000	5375,000
f2	3	5175,00000	43,301270	25,00000	5067,43368	5282,56632	5150,000	5225,000
f3	3	4966,66667	28,867513	16,66667	4894,95579	5038,37755	4950,000	5000,000
Total	9	5161,11111	165,411944	55,137315	5033,96424	5288,25799	4950,000	5375,000

Test of Homogeneity of Variances

daya sebar (cm)

Levene Statistic	df1	df2	Sig.
,941	2	6	,441

ANOVA

daya sebar (cm)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	211805,556	2	105902,778	89,706	,000
Within Groups	7083,333	6	1180,556		
Total	218888,889	8			

Post Hoc Tests

Multiple Comparisons

daya sebar (cm)

Tukey HSD

(I) formula	(J) formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
f1	f2	166,666667*	28,054180	,002	80,58874	252,74460
	f3	375,000000*	28,054180	,000	288,92207	461,07793
f2	f1	-166,666667*	28,054180	,002	-252,74460	-80,58874
	f3	208,333333*	28,054180	,001	122,25540	294,41126
f3	f1	-375,000000*	28,054180	,000	-461,07793	-288,92207
	f2	-208,333333*	28,054180	,001	-294,41126	-122,25540

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

Homogeneous Subsets

daya sebar (cm)

Tukey HSD[a]

formula		Subset for alpha = 0.05		
	N	1	2	3
f3	3	4966,66667		
f2	3		5175,00000	
f1	3			5341,66667
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 3. Data viskositas krim metil salisilat.

Penyimpanan	Viskositas d.Pa.s								
	Formula 1			Formula 2			Formula 3		
	1	2	3	1	2	3	1	2	3
Minggu ke-1	135	130	130	150	150	150	170	160	180
Minggu ke-2	130	140	135	150	145	150	180	170	170
Minggu ke-3	130	140	130	150	155	155	180	175	170
Minggu ke-4	130	130	135	150	150	140	170	170	160

Analisis One Way Anova viskositas minggu ke-1

```
NPAR TESTS
  /K-S(NORMAL)=viskositas formula
  /STATISTICS DESCRIPTIVES
  /MISSING ANALYSIS.
```

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
viskositas (d.Pa.S)	9	151,11	17,460	130	180
Formula	9	2,00	,866	1	3

One-Sample Kolmogorov-Smirnov Test

		viskositas (d.Pa.S)	formula
N		9	9
Normal Parameters[a,b]	Mean	151,11	2,00
	Std. Deviation	17,460	,866
Most Extreme Differences	Absolute	,155	,209
	Positive	,155	,209
	Negative	-,141	-,209
Kolmogorov-Smirnov Z		,466	,628
Asymp. Sig. (2-tailed)		,982	,826

a. Test distribution is Normal.

b. Calculated from data.

```
ONEWAY viskositas BY formula
  /STATISTICS DESCRIPTIVES HOMOGENEITY
  /MISSING ANALYSIS
  /POSTHOC=TUKEY ALPHA(0.05).
```

Oneway

Descriptives

viskositas (d.Pa.S)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
f1	3	131,67	2,887	1,667	124,50	138,84	130	135
f2	3	151,67	2,887	1,667	144,50	158,84	150	155
f3	3	170,00	10,000	5,774	145,16	194,84	160	180
Total	9	151,11	17,460	5,820	137,69	164,53	130	180

Test of Homogeneity of Variances

viskositas (d.Pa.S)

Levene Statistic	df1	df2	Sig.
1,684	2	6	,263

ANOVA

viskositas (d.Pa.S)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2205,556	2	1102,778	28,357	,001
Within Groups	233,333	6	38,889		
Total	2438,889	8			

Post Hoc Tests

Multiple Comparisons

viskositas (d.Pa.S)

Tukey HSD

(I) formula	(J) formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
f1	f2	-20,000*	5,092	,018	-35,62	-4,38
	f3	-38,333*	5,092	,001	-53,96	-22,71
f2	f1	20,000*	5,092	,018	4,38	35,62
	f3	-18,333*	5,092	,026	-33,96	-2,71
f3	f1	38,333*	5,092	,001	22,71	53,96
	f2	18,333*	5,092	,026	2,71	33,96

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

Homogeneous Subsets

viskositas (d.Pa.S)

Tukey HSD[a]

formula		Subset for alpha = 0.05		
	N	1	2	3
f1	3	131,67		
f2	3		151,67	
f3	3			170,00
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Analisis One Way Anova viskositas minggu ke-4

```
NPAR TESTS
  /K-S(NORMAL)=viskositas formula
  /STATISTICS DESCRIPTIVES
  /MISSING ANALYSIS.
```

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
viskositas (d.Pa.S)	9	151,11	17,989	130	180
Formula	9	2,00	,866	1	3

One-Sample Kolmogorov-Smirnov Test

		viskositas (d.Pa.S)	formula
N		9	9
Normal Parameters[a,b]	Mean	151,11	2,00
	Std. Deviation	17,989	,866
Most Extreme Differences	Absolute	,148	,209
	Positive	,148	,209
	Negative	-,120	-,209
Kolmogorov-Smirnov Z		,444	,628
Asymp. Sig. (2-tailed)		,989	,826

a. Test distribution is Normal.

b. Calculated from data.

```
ONEWAY viskositas BY formula
  /STATISTICS DESCRIPTIVES HOMOGENEITY
  /MISSING ANALYSIS
  /POSTHOC=TUKEY ALPHA(0.05).
```

Oneway

Descriptives

viskositas (d.Pa.S)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
f1	3	131,67	2,887	1,667	124,50	138,84	130	135
f2	3	150,00	5,000	2,887	137,58	162,42	145	155
f3	3	171,67	7,638	4,410	152,69	190,64	165	180
Total	9	151,11	17,989	5,996	137,28	164,94	130	180

Test of Homogeneity of Variances

viskositas (d.Pa.S)

Levene Statistic	df1	df2	Sig.
1,217	2	6	,360

ANOVA

viskositas (d.Pa.S)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2405,556	2	1202,778	39,364	,000
Within Groups	183,333	6	30,556		
Total	2588,889	8			

Post Hoc Tests

Multiple Comparisons

viskositas (d.Pa.S)

Tukey HSD

(I) formula	(J) formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
f1	f2	-18,333[*]	4,513	,016	-32,18	-4,49
	f3	-40,000[*]	4,513	,000	-53,85	-26,15
f2	f1	18,333[*]	4,513	,016	4,49	32,18
	f3	-21,667[*]	4,513	,007	-35,51	-7,82
f3	f1	40,000[*]	4,513	,000	26,15	53,85
	f2	21,667[*]	4,513	,007	7,82	35,51

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

Homogeneous Subsets

viskositas (d.Pa.S)

Tukey HSD[a]

formula		Subset for alpha = 0.05		
	N	1	2	3
f1	3	131,67		
f2	3		150,00	
f3	3			171,67
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 4. Data daya lekat krim metil salisilat.

Penyimpanan	Daya lekat (detik)								
	Formul 1			Formula 2			Formula 3		
	1	2	3	1	2	3	1	2	3
Minggu ke-1	5,48	4,96	5,29	7,40	7,96	7,27	9,97	9,87	9,23
Minggu ke-2	5,38	5,24	5,16	7,49	7,47	7,42	9,23	9,26	9,11
Minggu ke-3	4,51	5,33	5,47	6.84	7,34	7,79	9,24	9,33	9,47
Minggu ke-4	5,17	5,32	5,23	7,53	7,62	7,28	9,51	9,36	9,67

Analisis One Way Anova daya lekat minggu ke-1

```
NPAR TESTS
  /K-S(NORMAL)=formula dayalekat
  /STATISTICS DESCRIPTIVES
  /MISSING ANALYSIS.
```

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Formula	9	2,00	,866	1	3
daya lekat (detik)	9	749,2222	194,93831	496,00	997,00

One-Sample Kolmogorov-Smirnov Test

		formula	daya lekat (detik)
N		9	9
Normal Parameters[a,b]	Mean	2,00	749,2222
	Std. Deviation	,866	194,93831
Most Extreme Differences	Absolute	,209	,182
	Positive	,209	,182
	Negative	-,209	-,147
Kolmogorov-Smirnov Z		,628	,547
Asymp. Sig. (2-tailed)		,826	,926

a. Test distribution is Normal.

b. Calculated from data.

```
ONEWAY dayalekat BY formula
  /STATISTICS DESCRIPTIVES HOMOGENEITY
  /MISSING ANALYSIS
  /POSTHOC=TUKEY ALPHA(0.05).
```

Oneway

Descriptives

daya lekat (detik)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
f1	3	524,3333	26,31223	15,19137	458,9701	589,6965	496,00	548,00
f2	3	754,3333	36,66515	21,16864	663,2520	845,4146	727,00	796,00
f3	3	969,0000	40,14972	23,18045	869,2626	1068,7374	923,00	997,00
Total	9	749,2222	194,93831	64,97944	599,3794	899,0651	496,00	997,00

Test of Homogeneity of Variances

daya lekat (detik)

Levene Statistic	df1	df2	Sig.
,622	2	6	,568

ANOVA

daya lekat (detik)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	296710,222	2	148355,111	121,980	,000
Within Groups	7297,333	6	1216,222		
Total	304007,556	8			

Post Hoc Tests

Multiple Comparisons

daya lekat (detik)

Tukey HSD

(I) formula	(J) formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
f1	f2	-230,00000*	28,47481	,000	-317,3685	-142,6315
	f3	-444,66667*	28,47481	,000	-532,0352	-357,2981
f2	f1	230,00000*	28,47481	,000	142,6315	317,3685
	f3	-214,66667*	28,47481	,001	-302,0352	-127,2981
f3	f1	444,66667*	28,47481	,000	357,2981	532,0352
	f2	214,66667*	28,47481	,001	127,2981	302,0352

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

Homogeneous Subsets

daya lekat (detik)

Tukey HSD[a]

formula		Subset for alpha = 0.05		
	N	1	2	3
f1	3	524,3333		
f2	3		754,3333	
f3	3			969,0000
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Analisis One Way Anova daya lekat minggu ke-4

```
NPAR TESTS
  /K-S(NORMAL)=formula dayalekat
  /STATISTICS DESCRIPTIVES
  /MISSING ANALYSIS.
```

NPar Tests

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Formula	9	2,00	,866	1	3
daya lekat (detik)	9	741,0000	185,51819	517,00	967,00

One-Sample Kolmogorov-Smirnov Test

		formula	daya lekat (detik)
N		9	9
Normal Parameters[a,b]	Mean	2,00	741,0000
	Std. Deviation	,866	185,51819
Most Extreme Differences	Absolute	,209	,203
	Positive	,209	,203
	Negative	-,209	-,187
Kolmogorov-Smirnov Z		,628	,610
Asymp. Sig. (2-tailed)		,826	,851

a. Test distribution is Normal.

b. Calculated from data.

```
ONEWAY dayalekat BY formula
  /STATISTICS DESCRIPTIVES HOMOGENEITY
  /MISSING ANALYSIS
  /POSTHOC=TUKEY ALPHA(0.05).
```

Oneway

Descriptives

daya lekat (detik)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
f1	3	524,0000	7,54983	4,35890	505,2452	542,7548	517,00	532,00
f2	3	747,6667	17,61628	10,17076	703,9054	791,4279	728,00	762,00
f3	3	951,3333	15,50269	8,95048	912,8225	989,8441	936,00	967,00
Total	9	741,0000	185,51819	61,83940	598,3981	883,6019	517,00	967,00

Test of Homogeneity of Variances

daya lekat (detik)

Levene Statistic	df1	df2	Sig.
,980	2	6	,428

ANOVA

daya lekat (detik)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	274120,667	2	137060,333	676,656	,000
Within Groups	1215,333	6	202,556		
Total	275336,000	8			

Homogeneous Subsets

Multiple Comparisons

daya lekat (detik)

Tukey HSD

(I) formula	(J) formula	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
f1	f2	-223,66667*	11,62054	,000	-259,3217	-188,0116
	f3	-427,33333*	11,62054	,000	-462,9884	-391,6783
f2	f1	223,66667*	11,62054	,000	188,0116	259,3217
	f3	-203,66667*	11,62054	,000	-239,3217	-168,0116
f3	f1	427,33333*	11,62054	,000	391,6783	462,9884
	f2	203,66667*	11,62054	,000	168,0116	239,3217

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

Homogeneous Subsets

daya lekat (detik)

Tukey HSD[a]

formula	N	Subset for alpha = 0.05		
		1	2	3
f1	3	524,0000		
f2	3		747,6667	
f3	3			951,3333
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3,000.

Lampiran 5. Data analisis stabilitas viskositas krim metil salisilat.

Formula 1

```
Warning # 849 in column 23.  Text: in_ID
The LOCALE subcommand of the SET command has an invalid parameter.
It could
not be mapped to a valid backend locale.
T-TEST GROUPS=minggu(1 4)
  /MISSING=ANALYSIS
  /VARIABLES=stabilitas
  /CRITERIA=CI(.95).
```

T-Test

Group Statistics

	formula 1	N	Mean	Std. Deviation	Std. Error Mean
viskositas (d.Pa.s)	1	3	131,67	2,887	1,667
	2	3	131,67	2,887	1,667

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
										95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
viskositas (d.Pa.s)	Equal variances assumed	,000	1,000	,000	4	1,000	,000	2,357	-6,544	6,544
	Equal variances not assumed			,000	4,000	1,000	,000	2,357	-6,544	6,544

Formula 2

```
T-TEST GROUPS=minggu(1 4)
  /MISSING=ANALYSIS
  /VARIABLES=stabilitas
  /CRITERIA=CI(.95).
```

T-Test

Group Statistics

	formula 2	N	Mean	Std. Deviation	Std. Error Mean
viskositas (d.Pa.s)	1	3	145,00	5,000	2,887
	2	3	146,67	5,774	3,333

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
								Std. Error	95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
viskositas (d.Pa.s)	Equal variances assumed	,308	,609	-,378	4	,725	-1,667	4,410	-13,910	10,576
	Equal variances not assumed			-,378	3,920	,725	-1,667	4,410	-14,009	10,675

Formula 3

```
T-TEST GROUPS=minggu(1 4)
  /MISSING=ANALYSIS
  /VARIABLES=stabilitas
  /CRITERIA=CI(.95).
```

T-Test

Group Statistics

	formula 3	N	Mean	Std. Deviation	Std. Error Mean
viskositas (d.Pa.s)	1	3	170,00	10,000	5,774
	2	3	166,67	5,774	3,333

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
							Mean Differe nce	Std. Error Differe nce	95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)			Lower	Upper
viskositas (d.Pa.s)	Equal variances assumed	,400	,561	,500	4	,643	3,333	6,667	-15,176	21,843
	Equal variances not assumed			,500	3,200	,649	3,333	6,667	-17,152	23,819

Lampiran 6. Data analisis stabilitas daya lekat krim metil salisilat.

Formula 1

```
T-TEST GROUPS=minggu(1 4)
  /MISSING=ANALYSIS
  /VARIABLES=stabilitas
  /CRITERIA=CI(.95).
```

T-Test

Group Statistics

	formula 1	N	Mean	Std. Deviation	Std. Error Mean
daya lekat (detik)	1	3	524,3333	26,31223	15,19137
	2	3	524,0000	7,54983	4,35890

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower	Upper
daya lekat (detik)	Equal variances assumed	3,215	,147	,021	4	,984	,33333	15,80436	-43,54660	44,21327
	Equal variances not assumed			,021	2,327	,985	,33333	15,80436	-59,28105	59,94772

Formula 2

```
T-TEST GROUPS=minggu(1 4)
  /MISSING=ANALYSIS
  /VARIABLES=stabilitas
  /CRITERIA=CI(.95).
```

T-Test

Group Statistics

	FORMULA 2	N	Mean	Std. Deviation	Std. Error Mean
daya lekat (detik)	1	3	754,3333	36,66515	21,16864
	2	3	747,6667	17,61628	10,17076

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
daya lekat (detik)	Equal variances assumed	2,696	,176	,284	4	,791	6,66667	23,48522	-58,53876	71,87209
	Equal variances not assumed			,284	2,877	,796	6,66667	23,48522	-69,91972	83,25305

Formula 3

```
T-TEST GROUPS=minggu(1 4)
  /MISSING=ANALYSIS
  /VARIABLES=stabilitas
  /CRITERIA=CI(.95).
```

T-Test

Group Statistics

	FORMULA 3	N	Mean	Std. Deviation	Std. Error Mean
daya lekat (detik)	1	3	969,0000	40,14972	23,18045
	2	3	951,3333	15,50269	8,95048

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
						Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	t	df				Lower	Upper
daya lekat (detik)	Equal variances assumed	4,412	,104	,711	4	,516	17,66667	24,84843	-51,32363	86,65697
	Equal variances not assumed			,711	2,583	,536	17,66667	24,84843	-69,13968	104,47301

Lampiran 7. Data stabilitas daya sebar krim metil salisilat.
Formula 1.

```
T-TEST GROUPS=minggu(1 4)
  /MISSING=ANALYSIS
  /VARIABLES=stabilitas
  /CRITERIA=CI(.95).
```

T-Test

Group Statistics

	formula 1	N	Mean	Std. Deviation	Std. Error Mean
daya sebar (cm)	1	3	5341,66667	76,376262	44,095855
	2	3	5341,66667	28,867513	16,666667

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
daya sebar (cm)	Equal variances assumed	2,571	,184	,000	4	1,000	,000000	47,140452	-130,882877	130,882877
	Equal variances not assumed			,000	2,560	1,000	,000000	47,140452	-165,718476	165,718476

Formula 2

```
T-TEST GROUPS=minggu(1 4)
  /MISSING=ANALYSIS
  /VARIABLES=stabilitas
  /CRITERIA=CI(.95).
```

T-Test

Group Statistics

	formula 2	N	Mean	Std. Deviation	Std. Error Mean
daya sebar (cm)	1	3	5166,66667	62,915287	36,324158
	2	3	5175,00000	43,301270	25,000000

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	T	df				Lower	Upper
daya sebar (cm)	Equal variances assumed	,308	,609	-,189	4	,859	-8,333333	44,095855	-130,763055	114,096388
	Equal variances not assumed			-,189	3,548	,860	-8,333333	44,095855	-137,174605	120,507939

Formula 3

```
T-TEST GROUPS=minggu(1 4)
  /MISSING=ANALYSIS
  /VARIABLES=stabilitas
  /CRITERIA=CI(.95).
```

T-Test

Group Statistics

	formula 3	N	Mean	Std. Deviation	Std. Error Mean
daya sebar (cm)	1	3	4991,66667	38,188131	22,047928
	2	3	4966,66667	28,867513	16,666667

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
										95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
daya sebar (cm)	Equal variances assumed	,235	,653	,905	4	,417	25,000000	27,638540	-51,736889	101,736889
	Equal variances not assumed			,905	3,723	,420	25,000000	27,638540	-54,041168	104,041168