

LAMPIRAN

Lampiran 1. Hasil Tanaman Daun Mint



PT. PALAPA MUDA PERKASA

CHEMICALS PRODUCT AND CHEMICAL ANALYSIS SERVICE

Jalan Kalimulya No 23 Cilodong, Kota Depok Jawa Barat, 16417

Telepon:082113126822/021-27616322,SuratElektronik :

palapamudaperkasa2017@gmail.com

SAMPLE : DAUN MINT

HASIL PERCOBAAN		
1	NAMA SAMPEL	Daun Mint
2	NAMA ILMIAH	Menthae Piperitae
DATA PANEN		
3	BAGIAN TANAMAN YANG DIAMBIL	Daun
	UMUR TANAMAN	3-5 bulan setelah penanaman
	WAKTU PENGAMBILAN TANAMAN	5 mei 2023
	LOKASI PENGAMBILAN TANAMAN	Kebun Mini Herbal-PT. Palapa Muda Perkasa
	PEROLEHAN BERAT SIMPLISIA	10.120 gr
IDENTIFIKASI SIMPLISIA BASAH		
4	BAU	Khas
	WARNA	Hijau
	BENTUK	Lonjong sampai bundar telur
	LAINNYA (KEKHASAN)	Aromatik
PENCUCIAN & SORTASI BASAH		
5	JENIS PENGOTOR YANG DITEMUKAN	Akar, Tanah Kering
	BERAT SETELAH DITIRISKAN (GRAM)	9.778
	RENDEMEN BASAH % (BERAT SETELAH DITIRISKAN/BERAT PANEN X 100%)	$10.120 : 9.778 \times 100\% = 103\%$

Depok, 06 Juni 2023

Manager Quality

Muzdalifah A.

Lampiran 2. Determinasi Tanaman Daun Mint



Nomor : B-1088/II.6.2/IR.01.02/5/2023 29 Mei 2023
 Lampiran : -
 Perihal : Hasil Identifikasi/Determinasi Tumbuhan

Yth.
 Bpk./Ibu/Sdr(i). **Nadia Juliansa**
 UNIVERSITAS ESA UNGGUL

Bersama ini kami sampaikan hasil identifikasi/determinasi tumbuhan yang Saudara kirimkan ke "Herbarium Bogoriense", Direktorat Pengelolaan Koleksi Ilmiah BRIN Cibinong, adalah sebagai berikut :

No.	No. Kol.	Jenis	Suku
1.	Daun Mint	<i>Mentha × piperita</i> L.	Lamiaceae

Demikian, semoga berguna bagi Saudara.

Pit. Direktorat Pengelolaan Koleksi Ilmiah,
 Badan Riset dan Inovasi Nasional



Dr. Ratih Damayanti, S.Hut. M.Si.



Dokumen ini ditandatangani secara elektronik menggunakan sertifikat dari BSI, silahkan lakukan verifikasi pada dokumen elektronik yang dapat diunduh dengan melakukan scan QR Code

Lampiran 3. Hasil Minyak Atsiri Daun Mint



PT. PALAPA MUDA PERKASA
CHEMICALS PRODUCT AND CHEMICAL ANALYSIS SERVICE

Jalan Kalimulya No 23 Cilodong, Kota Depok Jawa Barat, 16417

Telepon : 08158289986/021-27616322, Surat Elektronik :
palapamudaperkasa2017@gmail.com



PALAPA
MUDA
PERKASA

Depok, 09 Juni 2023

SURAT KETERANGAN PENGUJIAN

NOMOR : PMP.102/WA.11/01/2023

PERIHAL : DATA DESTILASI

Kepada, Yth.
Bpk./ Ibu / Sdr(a). NADIA JULIANSA

Dengan Hormat,

Bersama ini kami sampaikan hasil data Destilasi yang saudara kirimkan "PT.Palapa Muda Perkasa" bidang penyedia proses bahan baku ekstrak-depok, adalah sebagai berikut :

1. PROSES SORTASI BASAH

No	Nama Sampel	Berat Basah	Metode Pencucian	Hasil sortasi
1	Daun Mint	10.288 gr	Air mengalir	9,778 gr

2. PROSES DESTILASI

No	Nama Sampel	Berat	Pelarut	Banyak	Proses Destilasi	Alat	Hasil
1	Daun Mint	9,778 gr	-	-	7 x 24 jam	Destilasi	50 mL

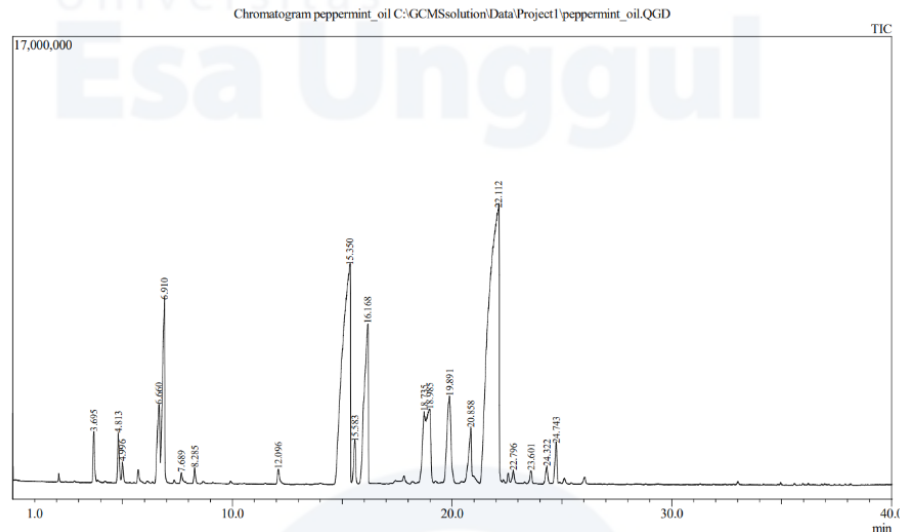
Depok, 06 Juli 2023

Manager Quality

Muzdalifah Wahdhaniyyah

DOKUMEN ASLI // NADIA JULIANSA // UNIVERSITAS ESA UNGGUL // PMP

Lampiran 4. Hasil Identifikasi GC-MS Daun Mint



Peak#	R.Time	Area	Area%	Height	Nama
1	3,695	8349521	0,97	3,42	.Alpha.-Pinene, (-)-
2	4,813	9591422	1,11	3,36	I-beta.-Pinene
3	4,996	3547558	0,41	1,39	.beta.-Phellandrene
4	6,660	23463132	2,72	5,32	l-Limonene
5	6,910	49934481	5,80	12,37	l,8-Cineole
6	7,689	2131894	0,25	0,69	.gamma.-Terpinene
7	8,285	2938245	0,34	1,07	Benzene, methyl(1-methylethyl)-(CAS)
8	12,096	3887015	0,45	0,99	3-Octanol (CAS) n-Octan-3-ol
9	15,350	200261538	23,24	14,78	Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2R-cis)-(CAS) p-Menthan-3-one, (1R,4R)-(+)- \$\$ (+)- Isomenthone \$\$ d-Isomenthone \$\$ d-Mentha
10	15,583	9713642	1,13	2,86	Benzofuran, 4,5,6,7-tetrahydro-3,6-dimen
11	16,168	71795171	8,33	10,33	Cyclohexanone, 5-methyl-2-(1-methylethyl)-, (2R-cis)-(CAS) p-Menthan-3-one, (1R,4R)-(+)-Isomenthone \$\$ d-Isomenthone \$\$ d-Mentha
12	18,735	28993347	3,37	4,76	Cyclohexanol, 5-methyl-2-(1-methylethenyl)- \$\$ p-Menth-8-en-3-ol \$\$ Isopregol
13	18,985	34057115	3,95	5,01	Cyclohexanol, 5-methyl-2-(1-methylethyl)-, acetate (CAS) Menthol acetate \$\$ Acetic Acid, Menthylester \$\$ Menthol

14	19,891	41455581	4,81	5,76	(+)- <i>Isomenthol</i>
15	20,858	20649686	2,40	3,70	<i>trans-Caryophyllene</i>
16	22,112	330250820	38,33	18,71	<i>Cyclohexanol, 5-methyl-2-(1-methylethyl)-, [1S-(1.alpha.,2.alpha.,5.beta.)]-</i> <i>\$\$ (1S, 2S, 5R)-(+)-</i> <i>Neomenthol \$\$ Neomenthol</i>
17	22,796	2723587	0,32	0,78	<i>.beta.-Bisabolene</i>
18	23,601	3037337	0,35	0,84	<i>3-Cyclohexene-methanol, .alpha.,.alpha</i>
19	24,322	4668736	0,54	1,16	<i>Germacrene D</i>
20	24,734	10146251	1,18	2,69	<i>2-Cyclohexen-1-one, 3-methyl-6-(1- methylethyl)</i>
		861596079	100,00	54163267	

Lampiran 5. Perhitungan Sediaan Emulgel 100 g

BAHAN	F1	F2	F3	F4	F5
Minyak Peppermint	$\frac{1}{100} \times 100$ = 1 g	$\frac{1}{100} \times 100$ = 1 g	$\frac{1}{100} \times 100$ = 1 g	$\frac{1}{100} \times 100$ = 1 g	$\frac{1}{100} \times 100$ = 1 g
HPMC	$\frac{2}{100} \times 100$ = 2 g	$\frac{2}{100} \times 100$ = 2 g	$\frac{2}{100} \times 100$ = 2 g	$\frac{2}{100} \times 100$ = 2 g	$\frac{2}{100} \times 100$ = 2 g
Parafin Cair	$\frac{5}{100} \times 100$ = 5 g	$\frac{5}{100} \times 100$ = 5 g	$\frac{5}{100} \times 100$ = 5 g	$\frac{5}{100} \times 100$ = 5 g	$\frac{5}{100} \times 100$ = 5 g
Span 80	$\frac{3}{100} \times 100$ = 3 g	$\frac{6}{100} \times 100$ = 6 g	$\frac{4,5}{100} \times 100$ = 4,5 g	$\frac{3,75}{100} \times 100$ = 3,75 g	$\frac{5,25}{100} \times 100$ = 5,25 g
Tween 80	$\frac{7}{100} \times 100$ = 7 g	$\frac{4}{100} \times 100$ = 4 g	$\frac{5,5}{100} \times 100$ = 5,5 g	$\frac{6,25}{100} \times 100$ = 6,25 g	$\frac{4,75}{100} \times 100$ = 4,75 g
Metilparaben	$\frac{0,18}{100} \times 100$ = 0,18 g	$\frac{0,18}{100} \times 100$ = 0,18 g	$\frac{0,18}{100} \times 100$ = 0,18 g	$\frac{0,18}{100} \times 100$ = 0,18 g	$\frac{0,18}{100} \times 100$ = 0,18 g
Propilparaben	$\frac{0,02}{100} \times 100$ = 0,02 g	$\frac{0,02}{100} \times 100$ = 0,02 g	$\frac{0,02}{100} \times 100$ = 0,02 g	$\frac{0,02}{100} \times 100$ = 0,02 g	$\frac{0,02}{100} \times 100$ = 0,02 g
Propilen glikol	$\frac{10}{100} \times 100$ = 10 g	$\frac{10}{100} \times 100$ = 10 g	$\frac{10}{100} \times 100$ = 10 g	$\frac{10}{100} \times 100$ = 10 g	$\frac{10}{100} \times 100$ = 10 g
Aquades	= 100-(1g + 2g + 5g + 3g + 7g + 0,18g + 0,02g + 10g) = 100-(28,2) = 71,8 g	= 100-(1g + 2g + 5g + 6g + 4g + 0,18g + 0,02g + 10g) = 100-(28,2) = 71,8 g	= 100-(1g + 2g + 5g + 4,5g + 5,5g + 0,18g + 0,02g + 10g) = 100-(28,2) = 71,8 g	= 100-(1g + 2g + 5g + 3,75g + 6,25g + 0,18g + 0,02g + 10g) = 100-(28,2) = 71,8 g	= 100-(1g + 2g + 5g + 5,25g + 4,75g + 0,18g + 0,02g + 10g) = 100-(28,2) = 71,8 g

Lampiran 6. Perhitungan Formula Optimum 200 g

Nama Bahan	Formula
HPMC	$= \frac{1}{100} \times 200$ $= 2 \text{ g}$
Minyak Peppermint	$= \frac{2}{100} \times 200$ $= 4 \text{ g}$
Parafin Cair	$= \frac{5}{100} \times 200$ $= 10 \text{ g}$
Span 80	$= \frac{4,67}{100} \times 200$ $= 9,34 \text{ g}$
Tween 80	$= \frac{5,33}{100} \times 200$ $= 10,66 \text{ g}$
Metilparaben	$= \frac{0,18}{100} \times 200$ $= 0,36 \text{ g}$
Propilparaben	$= \frac{0,02}{100} \times 200$ $= 0,04 \text{ g}$
Propilen glikol	$= \frac{10}{100} \times 200$ $= 20 \text{ g}$

Lampiran 7. Hasil Potongan Tanaman Daun Mint



Lampiran 8. Sertifikat Analisis Propilen Glikol



HASIL PEMERIKSAAN

Nama Bahan : Propylene Glycol
 No Batch : J 0041/18 (C815HBK22T)
 Ex : Dow Chemical Pacific, Singapore
 E.D. : 11/2025
 Grade : Farma

Jenis Pemeriksaan	Persyaratan USP NF 19	Hasil
Pemerian	Cairan kental jernih, tidak berwarna, tidak berbau, rasa agak manis, hyroskopik	Sesuai
Kelarutan	Dapat bercampur dgn air, dengan etanol dan dengan kloroform	Sesuai
Keasam-basaan	≤ 0,3 ml NaOH 0.1N	0,2 ml NaOH 0,1 N
Index Bias	1,431 - 1,433	1,433
Bobot per-ml	1,035 g - 1,037 g/ml	1,0364 g/ml
pH	±6,5	7.476

Kesimpulan : Memenuhi Syarat

Cikarang, 22 – 01 – 2022

Pemeriksa

Aotria Warisk
Staff QC

Penanggung Jawab

Dra. Tri Hartati
Apoteker

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 • BANGKALAN : Jl. Boulevard Raya Blok TSD No. 5, Jakarta 14240 Telp. (021) 4564660-64 Fax. (021) 4532616
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 • YOGYAKARTA : Jl. Driyayuguna No. 45, Yogyakarta Telp. (0274) 543348, 5153390 Fax. (0274) 5433389
 • SURABAYA : Jl. Tidar No. 89, Surabaya Telp. (031) 5322867, 5320557 Fax. (031) 5310465
 • MEDAN : Jl. Iskandar Muda no. 40 B, Medan Telp. (061) 4148272, 4523159 Fax. (061) 4525986
 SUB BRANCH OFFICE : TANGERANG, BOGOR, CIKARANG, CIREBON, TASIKMALAYA, SOLO, PURWOKERTO, TEGAL, MALANG, SIDARJO, DENPASAR, PALEMBANG, MAKASSAR
 The Nationwide Chemicals and Ingredients Distributor

Lampiran 9. Sertifikat Analisis Span 80

南通丰源化工有限公司
Nantong FengYuan Chemical Co., Ltd.

产 品 检 验 报 告

Certificate Of Analysis

编号 QR/SH8.2.4-03

产品名称 Name	乳化剂 Emulsifier	规格型号 Type	Span-80	
生产批号 Batch Number	17030156	生产日期 Production Date	17.02.19	
数量(吨) Quantity(Tons)		报告日期 Report Date	17.02.21	
执行标准 Standard	HG/T3509-2000			
检测项目 Test items	检测标准 Test Standard	检测结果 Test result		
外观 Appearance	琥珀色至棕粘稠油状物 Amber viscous grease	黄色粘稠油状物 Amber viscous grease		
色度 Color	≤6# (Gardner)	5#		
酸值 mgKOH/g Acid value	≤8.0	6.15		
皂化值 mgKOH/g	140-160	43.51		
羟值 mgKOH/g Hydroxyl value	190-220	88.71		
水份 Water	≤1.5%	0.52%		
以下空白 Below Blank				
判定 Result	合格 Qualified			
检验	顾小青	复核 许本民	鉴定	周长金

Lampiran 10. Sertifikat Analisis Metilparaben



Certificate of Analysis

Inhibitors • Screening Libraries • Proteins

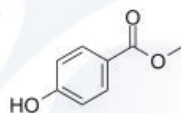
Methyl Paraben

Cat. No.: HY-N0349
 CAS No.: 99-76-3
 Batch No.: 33250
 Chemical Name: Benzoic acid, 4-hydroxy-, methyl ester

PHYSICAL AND CHEMICAL PROPERTIES

Molecular Formula: $C_8H_8O_3$
 Molecular Weight: 152.15
 Storage: Powder -20°C 3 years
 4°C 2 years
 In solvent -80°C 6 months
 -20°C 1 month

Chemical Structure:



ANALYTICAL DATA

Appearance: White to off-white (Solid)
 1H NMR Spectrum: Consistent with structure
 Purity (HPLC): 99.71%
 Conclusion: The product has been tested and complies with the given specifications.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Lampiran 11. Sertifikat Analisis Tween 80



CERTIFICATE OF ANALYSIS, QUALITY AND CONFORMITY

Product Name: Tween-80	
Product Code: CH077	Expiry Date : 31/03/2027
Lot Number: G18-19/Jul/30	Release Date: 25/07/2018
Analytical Report Number: QAD/AR-18/07-682	Page No : Page 1 of 1

TESTS CONDUCTED	SPECIFICATIONS	OBSERVATIONS	REMARKS
CAS No.	9005-65-6	9005-65-6	Complies
Chemical Name	Polyoxyethylene sorbitan monooleate; Polysorbate-80; Tween80	Polyoxyethylene sorbitan monooleate; Polysorbate-80; Tween80	Complies
Appearance	Yellow to amber colored viscous, oily liquid	Yellow to amber colored viscous, oily liquid	Complies
Solubility	1 ml miscible in 1 ml of water	1 ml miscible in 1 ml of water	Complies
Hydroxyl value	65 - 80	75	Complies
Saponification value	45 - 55	45	Complies
Acid value	<=2.0	<=1.70	Complies
Water (K.F.)	<=3.0%	<=2.78%	Complies

Final Results: COMPLIES

This is to certify that this lot passes and it conforms to the above mentioned tests and specifications.

TESTED BY (Pooja Sutar) MICROBIOLOGIST	CHECKED BY (Madhavi Sawant) HEAD MICROBIOLOGY	APPROVED BY (Rupali Sabale) HEAD QUALITY ASSURANCE

End Of The Report

CH077COAQAD/FR/031,Rev.00/01.01.2018

Micromaster laboratories Pvt.Ltd
 Manufacturer and Exporter
 Unit No.38/39, Kalpataru Industrial Estate ,Near Runwal Estate,Behind R Mall,
 Ghodbunder Road,Thane (W)-400607,Maharashtra,India
 Tel:- +91-22-2589 5505sales@micromasterlab.com

Lampiran 12. Sertifikat Analisis Parafin Cair



FDA LICENCE NO.: KD- 679 DT. 05.11.2008

LIGHT LIQUID PARAFFIN (I.P.)

CERTIFICATE OF ANALYSIS

ANALYSIS APPLIED AS PER I.P.2010 SPECIFICATIONS

SR.NO	CHARACTERISTICS	REQUIREMENT AS PER STANDARD	RESULT
01.	DESCRIPTION	A TRANSPARENT COLOURLESS OILY LIQUID, FREE FROM FLUORESCENCE BY DAY LIGHT, ALMOST ODOURLESS WHEN COLD.	COMPLIES
02.	WEIGHT PER ML	0.820 – 0.880 gm/ml	0.830 gm/ml
03.	DYNAMIC VISCOSITY @ 20°C	25 mPas – 80 mPas	48.0 mPas
04.	LIGHT ABSORPTION @ 240-280NM	NMT 0.1	PASSES (0.08)
05.	ACIDITY / ALKALINITY	COMPLIES TEST	COMPLIES
06.	READILY CARBONISABLE SUBSTANCES	COMPLIES TEST	COMPLIES
07.	SOLID PARAFFINS	COMPLIES TEST	COMPLIES
08.	SULPHUR COMPOUNDS	COMPLIES TEST	COMPLIES

REMARKS : ABOVE PERFORMED TESTS COMPLIES AS PER I.P.2010 SPECIFICATION.

Lampiran 13. Sertifikat Analisis HPMC

**Certificate of Analysis****(Representative Sample Certificate)**

Product Name: Hydroxypropyl Methylcellulose
INCI Name: Hydroxypropyl methylcellulose
CAS Number: 9004-65-3
Lot Number: Not available (data may vary slightly with different lots or batches)
Expiration Date: 36 months from production date

Analytical Tests	Specification	Analysis
Appearance	Off-white to yellowish powder	pass
Odor	Characteristic	pass
Viscosity, 2% in water at 20°C	60,000-90,000	83,921
Moisture as packaged	<7.0%	2.5
Sodium Chloride	<5.0%	0.4
Particle Size, thru 40 U.S. Std. Sieve	>99	100

The above data were obtained using the test indicated and is subject to the deviation inherent in the test method. Results may vary under other test methods or conditions.

This report is not to be signed.

Disclaimer: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability & completeness of such information for his own particular use.

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Lampiran 14. Sertifikat Analisis Propilparaben



Alpha Chemika
ISO 9001 Quality System certified Organization
House Of Unlimited Chemicals



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Skype ID : tanmay1977 • Email: info@alphachemika.co.in / sales@alphachemika.co.in

CERTIFICATE OF ANALYSIS

Name Of Item : PROPYL-P-HYDROXY BENZOATE **Formula :** C₁₀H₁₂O₃
(Propyl Paraben)

M.W. : 180.21 **Batch No. :**

CAS NO. : 94-13-3 **Cat. No. :** AL3848 05000

Date Of Mfg. : **Date of Analysis :**

Type Of Test	Standard	Observed
Description	White crystalline powder	White crystalline powder
Assay	99.5 - 100.5%	99.60%
Impurities reacting acid	Passes test	Passes test
Lead (Pb)	<0.001%	0.0008%
Copper (Cu)	<0.0025%	<0.0025%
Zinc (Zn)	<0.0025%	0.002%
Arsenic (As)	<0.0003%	0.0002%
Loss on drying at 60°C/2hrs	<0.5%	0.4%
Sulphated ash	<0.05%	0.048%

Results : The above product complies with LR grade

Registered Under Small Scale Industries Maharashtra (India)

TESTED BY : HITESH KUNJATHUR	ANALYSED BY : PRITI DURİ	CHECKED BY : PRITI DURİ
<p>For ALPHA CHEMIKA</p>  <p>Auth. Signatory</p> <p>Signed By : _____ (QC Head)</p>		

Lampiran 15. Alat dan Bahan

 <p>Timbangan Analitik</p>	 <p>Hot Plate</p>	 <p>Viskometer Digital</p>
 <p>pH Meter</p>	 <p>Alat-alat gelas kaca umum</p>	 <p>Lumpang dan Alu</p>
 <p>Minyak Atsiri Mint</p>	 <p>Tween 80</p>	 <p>Span 80</p>
 <p>HPMC</p>	 <p>Parafin Cair</p>	 <p>Metilparaben</p>
 <p>Propilparaben</p>	 <p>Propilen Glikol</p>	 <p>Inkubator</p>

Lampiran 16. Hasil ANOVA *Simplex Lattice Design* Respon Uji pH

Response 1: Uji pH

Source	Sum of Squares	df	Mean Square	F-value	p-value	
Model	0.5941	1	0.5941	2.57	0.1603	not significant
⁽¹⁾ Linear Mixture	0.5941	1	0.5941	2.57	0.1603	
Residual	1.39	6	0.2315			
Lack of Fit	0.5200	3	0.1733	0.5984	0.6582	not significant
Pure Error	0.8689	3	0.2896			
Cor Total	1.98	7				

Fit Statistics

Std. Dev.	0.4811	R²	0.2996
Mean	5.40	Adjusted R²	0.1828
C.V. %	8.92	Predicted R²	-0.4913
		Adeq Precision	3.0206

Lampiran 17. Hasil ANOVA *Simplex Lattice Design* Respon Uji Daya Lekat

Response 2: Uji Daya Lekat

Source	Sum of Squares	df	Mean Square	F-value	p-value	
Model	30.71	2	15.36	10.78	0.0154	significant
⁽¹⁾ Linear Mixture	3.85	1	3.85	2.71	0.1609	
AB	26.86	1	26.86	18.85	0.0074	
Residual	7.13	5	1.43			
Lack of Fit	1.70	2	0.8478	0.4684	0.6652	not significant
Pure Error	5.43	3	1.81			
Cor Total	37.84	7				

Fit Statistics

Std. Dev.	1.19	R²	0.8117
Mean	8.07	Adjusted R²	0.7364
C.V. %	14.79	Predicted R²	0.4342
		Adeq Precision	6.8818

Lampiran 18. Hasil ANOVA *Simplex Lattice Design* Respon Uji Daya Sebar

Response 3: Uji Daya Sebar

Source	Sum of Squares	df	Mean Square	F-value	p-value	
Model	3.56	2	1.78	14.59	0.0082	significant
⁽¹⁾ Linear Mixture	0.4080	1	0.4080	3.34	0.1270	
AB	3.15	1	3.15	25.84	0.0038	
Residual	0.6101	5	0.1220			
Lack of Fit	0.2515	2	0.1258	1.05	0.4506	not significant
Pure Error	0.3586	3	0.1195			
Cor Total	4.17	7				

Fit Statistics

Std. Dev.	0.3493	R²	0.8537
Mean	6.17	Adjusted R²	0.7952
C.V. %	5.66	Predicted R²	0.6088
		Adeq Precision	7.9836

Lampiran 19. Analisis Data Respon Uji pH SPSS *One Sample T Test*

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Hasil Uji pH	.219	3	.	.987	3	.780

a. Lilliefors Significance Correction

T-TEST

```

/TESTVAL=5.345
/MISSING=ANALYSIS
/VARIABLES=Hasil
/ES DISPLAY(TRUE)
/CRITERIA=CI (.95).
    
```

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Hasil Uji pH	3	6.8133	.02517	.01453

One-Sample Test

Test Value = 5.345

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Hasil Uji pH	101.058	2	<.001	1.46833	1.4058	1.5308

Lampiran 20. Analisis Data Respon Uji Daya Lekat SPSS *One Sample T Test*

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Hasil Uji Daya Lekat	.234	3	.	.978	3	.717

a. Lilliefors Significance Correction

T-TEST

```

/TESTVAL=10.431
/MISSING=ANALYSIS
/VARIABLES=Hasil
/ES DISPLAY(TRUE)
/CRITERIA=CI(.95).
    
```

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Hasil Uji Daya Lekat	3	9.2533	1.44587	.83477

One-Sample Test

Test Value = 10.431

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Hasil Uji Daya Lekat	-1.411	2	.294	-1.17767	-4.7694	2.4141

Lampiran 21. Analisis Data Respon Uji Daya Sebar SPSS *One Sample T Test*

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Hasil Uji Daya Sebar	.276	3	.	.942	3	.537

a. Lilliefors Significance Correction

T-TEST

```

/TESTVAL=5.364
/MISSING=ANALYSIS
/VARIABLES=Hasil
/ES DISPLAY(TRUE)
/CRITERIA=CI (.95) .
    
```

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Hasil Uji Daya Sebar	3	5.8900	.10817	.06245

One-Sample Test

Test Value = 5.364

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Hasil Uji Daya Sebar	8.423	2	.014	.52600	.2573	.7947

Lampiran 22. Hasil Uji Respon pH, Daya Lekat, dan Daya Sebar

Run	pH			
	Data 1	Data 2	Data 3	Mean \pm SD
1	7,24	5,12	5,10	5,82 \pm 1,22
2	4,26	4,54	5,6	4,65 \pm 0,70
3	5,61	5,29	4,71	5,2 \pm 0,45
4	6,00	4,93	4,90	5,27 \pm 0,62
5	6,98	5,15	4,77	5,63 \pm 1,18
6	5,02	4,84	4,18	4,68 \pm 0,44
7	7,08	5,24	5,54	5,95 \pm 0,98
8	5,74	5,78	6,38	5,96 \pm 0,35

Run	Daya Lekat (detik)			
	Data 1	Data 2	Data 3	Mean \pm SD
1	2,72	7,98	8,95	6,55 \pm 3,35
2	5,82	3,64	11,4	6,86 \pm 4,00
3	6,65	14,65	7,75	9,68 \pm 4,33
4	3,14	3,01	3,72	10,91 \pm 0,37
5	6,82	15,00	7,78	9,86 \pm 4,47
6	10,82	9,14	7,25	9,07 \pm 1,78
7	2,80	4,90	3,38	3,69 \pm 1,08
8	9,47	12,78	10,50	7,94 \pm 1,69

Run	Daya Sebar (cm)			
	Data 1	Data 2	Data 3	Mean \pm SD
1	7,56	7,25	7,30	7,36 \pm 0,16
2	7,27	6,72	5,9	6,63 \pm 0,68
3	5,46	5,50	5,25	5,4 \pm 0,13
4	4,95	4,98	5,03	4,98 \pm 0,04
5	6,72	6,32	5,82	6,28 \pm 0,45
6	6,15	5,51	5,42	5,69 \pm 0,39
7	6,81	6,62	6,63	6,68 \pm 0,10
8	6,49	6,13	6,45	6,35 \pm 0,19

Lampiran 23. Hasil Uji Stabilitas pH, Daya Sebar, Daya Lekat, dan Viskositas

Siklus	pH			
	Data 1	Data 2	Data 3	Mean \pm SD
0	6,76	6,81	6,84	6,81 \pm 0,04
1	6,83	6,85	6,82	6,83 \pm 0,01
2	6,38	6,40	6,37	6,38 \pm 0,01
3	6,40	6,40	6,42	6,40 \pm 0,01
4	6,51	6,50	6,49	6,50 \pm 0,01
5	6,50	6,43	6,50	6,46 \pm 0,04
6	6,46	6,47	6,43	6,45 \pm 0,02

Siklus	Daya Sebar (cm)			
	Data 1	Data 2	Data 3	Mean \pm SD
0	6,01	5,80	5,86	5,89 \pm 0,10
1	5,76	5,49	5,13	5,46 \pm 0,31
2	6,98	5,07	5,29	5,78 \pm 1,04
3	5,86	5,73	5,32	5,63 \pm 0,28
4	5,40	5,39	5,87	5,55 \pm 0,27
5	5,22	5,55	5,57	5,44 \pm 0,19
6	5,49	5,68	5,46	5,54 \pm 0,11

Siklus	Daya Lekat (detik)			
	Data 1	Data 2	Data 3	Mean \pm SD
0	10,56	9,50	7,70	9,25 \pm 1,44
1	5,26	10,51	7,40	7,72 \pm 2,63
2	7,54	6,25	7,04	7,03 \pm 0,65
3	4,63	4,39	4,96	4,66 \pm 0,28
4	8,30	7,88	5,35	7,17 \pm 1,59
5	5,35	8,01	10,27	7,87 \pm 2,46
6	6,52	7,27	5,14	6,31 \pm 1,08

Siklus	Viskositas (cP)			
	Data 1	Data 2	Data 3	Mean \pm SD
0	6810	6980	7220	7003 \pm 205,9
1	8850	7850	9180	8626 \pm 692,5
2	6120	6430	6600	6383 \pm 243,3
3	8140	8300	8440	8293 \pm 150,1
4	7860	7720	7300	7626 \pm 291,3
5	5960	6780	7080	6606 \pm 579,7
6	7250	7760	7990	7666 \pm 378,7