

LAMPIRAN

Lampiran 1. Formulir Bimbingan Skripsi



UNISA
UNIVERSITAS AISYIYAH PALEMBANG

FAKULTAS KESEHATAN DAN TEKNOLOGI (FKesT)
PROGRAM STUDI :
SI FARMASI

Jl. Kol. H. Burlian – Lr. M. Husin KM. 7,5 No. 907 Kota Palembang, Kode Pos 30152, Telp (0711) 417135
Email: farmasi@unisa-palembang.ac.id

FORMULIR BIMBINGAN SKRIPSI

Nama : Deni Wijaya
NIM : 214820103005
Nama Pembimbing : Intan Trisakti, M.Farm
Judul Skripsi : Pengaruh Amilum Manihot Terhadap Karakteristik Fisik Formula *Edible Film Candy* Sebagai Inovasi Pangan Fungsional.

No.	Tanggal Konsultasi	Keterangan	Paraf Pembimbing
1	17 April 2025	Revisian masalah judul	
2	5 Mei 2025	Revisian pemilihan larutan	
3	8 Mei 2025	Revisian pemilihan larutan	
4	14 Mei 2025	Revisian hasil ekstrak	
5	21 Mei 2025	Revisian hasil kstrak	
6	23 Mei 2025	Revisian bab 4	
7	2 Juni 2025	Revisian bab 4 dan data hasil	
8	5 Juni 2025	Revisian bab 4 dan data hasil	
9	15 juni 2025	Revisian bab 4 dan data hasil	
10	18 Juni 2025	Revisian bab 4	
11	26 Juni 2025	Revisian bab 4	
12	10 juli 2025	Revisian bab 4	
13	22 juli 2025	Revisian bab 5	
14	5 Agustus 2025	Revisian bab 5	
15	9 Agustus 2025	Acc proposal dan PPT semhas	

Formulir Bimbingan Skripsi



UNISA FAKULTAS KESEHATAN DAN TEKNOLOGI (FKesT)
UNIVERSITAS AISYIYAH PALEMBANG PROGRAM STUDI :
SI FARMASI


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13	22 juli 2025	Revisian bab 5	
14	5 Agustus 2025	Revisian bab 5	
15	9 Agustus 2025	Acc proposal dan PPT semhas	

Lampiran 2. Surat Izin Laboratorium

	SURAT	No Dokumen	Form-A I
	PERMOHONAN IZIN PENELITIAN PROGRAM STUDI S-1 FARMASI UNIVERSITAS AISYIYAH PALEMBANG	Berlaku Sejak	
		Revisi	000

Hal : Permohonan Izin Penelitian

Kepada Yth
Kabag Laboratorium Terpadu
Universitas 'Aisyiyah Palembang

1	Skripsi
2	PKM/LKTI
3	Penelitian Dosen
4	Luar

Assalamualaikum Wr. Wb.

Sehubungan dengan penelitian kami dalam bidang Teknologi Farmasi, dengan:

Judul Penelitian : Formulasi *Edible Film Candy* ekstrak mengkudu (*Morinda citrifolia L.*) sebagai inovasi pangan pengontrol tekanan darah.

Nama Pembimbing : 1. Intan Trisakti S.Farm., M.Farm
2. apt. Onny Indriani, M.Farm

No	Nama	NIM/NIP/NIK	No. HP
1	Deni Wijaya	214820103005	085349554943

Bermaksud mengajukan izin penelitian di Laboratorium^{*)}: **Farmasetika Dasar / Teknologi Farmasi / Kimia Farmasi / Biologi Farmasi / Farmakologi / Mikrobiologi / Komputasi Prodi S1 Farmasi Universitas 'Aisyiyah Palembang.**

Penelitian tersebut akan kami laksanakan selama: ...⁴... bulan,

yang terhitung dari :

21	04	2025
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 s.d

21	07	2025
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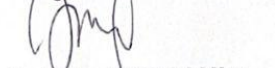
Sebagai bahan pertimbangan, bersama ini dilampirkan lembar pengesahan proposal penelitian. Demikian permohonan kami, atas perhatiannya diucapkan terima kasih.

Palembang, 16 April 2025.....


Mengetahui,
Dosen Pembimbing



Intan Trisakti S.Farm., M.Farm

Menyetujui,
Kabag Laboratorium Terpadu


Neni Riyanti, SKM., M.Kes

Pemohon


Deni Wijaya


Kaprod S1 Farmasi

apt. Onny Indriani, M.Farm





**FAKULTAS ILMU KESEHATAN DAN TEKNOLOGI
'AISYIYAH PALEMBANG
PROGRAM STUDI SI FARMASI**

Jl. Kol. H. Burlian –Lr. M. Husin No. 907 RT. 12/RW. 04 Kel. Karya Baru
Kec. Alang-alang LebarKM. 7,5 Palembang 30152 Telp. 0711 -421981

www.unisa-palembang.ac.id

farmasi.aisyiyah@gmail.com

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

**FORMULIR
PERNYATAAN SELESAI REVISI SKRIPSI*)
(S-06)**

Yang bertandatangan dibawah ini, tim penguji Skripsi 1/ Skripsi 2*):

Nama Mahasiswa : Deni Wijaya
NIM : 214820103005
Judul Penelitian : Pengaruh Amilum Manihot Terhadap Karakteristik Fisik
Formula *Edible Film Candy* Sebagai Inovasi Pangan
Fungsional.

Pembimbing 1 : Intan Trisakti, M.Farm
Pembimbing 2 : apt. Onny Indriani, M.Farm
Tanggal Ujian : 27 Agustus 2025

Mencerangkan bahwa naskah Proposal/ Skripsi*) telah selesai direvisi oleh tim penguji.

Nama	Tanda Tangan	Tanggal
1. Intan Trisakti, M.Farm.		15-Sep-2025
2. apt. Onny Indriani, M.Farm.		30-08-2025
3. Ulik Alta, S.Farm., M.Kes.		30-08-2025
4. apt. Galih Pratiwi, M.Pharm.Sci.		18-Sep-2025

*) : Coret yang tidak perlu.

Lampiran 3. Sertifikat Amilum Manihot

Intelligent Materials Pvt. Ltd.

www.nanoshel.com, sales@nanoshel.com



Certificate of Analysis

Tapioca Starch Powder

Stock No: NS6130-12-000918 , CAS: 65996-62-5

Product Name	:	Tapioca Starch Powder
Stock No	:	NS6130-12-000918
CAS	:	65996-62-5
Assay	:	99.9%

Note 1: Values are given in % unless otherwise specified.

Note 2: All figures above are weight for weight as determined by ICP



NANOSHEL LLC (In Collaboration)
3422 Old Capitol Trial Suit 1305, Wilmington DE - 19808 USA
(001) 302 652-3464, + 91 9779-880077

Lampiran 5. Sertifikat Nipasol

	<h1 style="margin: 0;">Alpha Chemika</h1> <p style="margin: 0; font-size: small;">ISO 9001 Quality System certified Organization</p> <p style="margin: 0; font-style: italic;">House Of Unlimited Chemicals</p>	
ALPHA CHEMIKA, 102, 1st Floor, B Wing, Savgan Heights, RTO Road, Four Bungalow, Andheri (W), Mumbai 400 053. Maharashtra (India) Tel: +91 22 65218147 ● +91 22 26317055 ● +91 22 26330745 ● TeleFax : 91-22-26317055 ● Mobile : +91 9820 385757 ● +91 9769 472001 Skype ID : tanmay1977 ● Email: info@alphachemika.co.in / sales@alphachemika.co.in		


CERTIFICATE OF ANALYSIS

Name Of Item : PROPYL-P-HYDROXY BENZOATE (Propyl Paraben) M.W. : 180.21 CAS NO. : 94-13-3 Date Of Mfg. :	Formula : C ₁₀ H ₁₂ O ₃ Batch No. : Cat. No. : AL3848 05000 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 style="margin: 0; font-size: x-small;">For ALPHA CHEMIKA</p>  <p style="margin: 0; font-size: x-small;">Auth. Signatory</p> <p style="margin: 0;">Signed By : _____</p> <p style="margin: 0; font-size: x-small;">(QC Head)</p>		

Lampiran 6. Sertifikat HPMC

Ashland

Page 1 of 2

Certificate of Analysis

				Customer Order: 714001461# Ordered Quantity: 20.000 BX Shipped From: ALE BE ANTWERP KRSS W3P C1D
				Order Number: 8277543/000010 Delivery: 851898380/000010 Date Shipped: December 17, 2021 Sold To Number: 692867
MENCEL K100M BX 16KG Benecel (TM) K100M HPMC Type 2208 100000 mPas Hydroxypropylmethyl Cellulose Ashland Material Number: 821964 Customer Material Number: 110687622				
Characteristics	Unit	Specification	Method	Batch
				0002314427
Date of Manufacture				October 11, 2021
Test date				October 17, 2021
Loss on drying	%	0.0 - 5.0	DGC REG 01.01b	1.8
Viscosity 2% solution, dry	mPa.s	75000 - 140000	DGC REG 01.02	112000
Sulphate Ash/Res. On Ign.	%	0.0 - 1.5	DGC REG 01.06a	0.1
pH of solution		5.0 - 8.0	DGC REG 01.03	6.9
Hydroxypropoxyl content	%	9.0 - 12.0	DGC REG 01.05b	8.8
Methoxyl content	%	20.0 - 24.0	DGC REG 01.05b	23.0
Quantity Ordered				20.000 BX

Notes:

ID - pass

The Certified range data below are based on intermittent testing:

Propylene Chlorohydrins, ppm: <=0,1
Heavy metals, (as Pb), ppm: <=20
As, ppm: <=3
Cd, ppm: <=1
Hg, ppm: <=1
Pb, ppm: <=2

The above product is compliant with the monograph requirements for hydroxypropylmethylcellulose in the current editions of the FCC, the JUSCP/110 464 and the 96/97/EC; E 464. This product has been manufactured in accordance with current Good Manufacturing Practices in 21CFR Part 110.

Best if used within 3 years of date of manufacture. Our products have a retesting interval, which is assigned to assure that the product can still satisfy the original specifications to which these products are sold.

Printed: December 11, 2021

14:25:22

Lampiran 7. Sertifikat Menthol



Fully Certified by:



CERTIFICATE OF ANALYSIS

Issued Date : 25 July 2024

PRODUCT INFORMATION

1. Product Name : **NATURAL MENTHOL CRYSTAL**
2. Cust Code : MENTHOL MINTBERG
3. CAS Number : 2216-51-5
4. Production Date : October 26, 2023
5. Shelf Life : 36 Months in Fully Sealed Containers
6. Quantity of Purchased : 75 Kg
7. Packaging : 3 VAT @ 25 Kg
8. Batch Number : 231026/57090

ORGANOLEPTIC PROPERTIES

1. Color and Appearance : Transparent White Shiny Large Crystals
2. Odor : Asian Species with the Characteristics of Natural Menthol
3. Storage Condition : Store in air tight containers, in a cool dry area, away from direct sunlight

TECHNICAL PROPERTIES

Test Item	Specification	Result
Melting Point (°C)	41 - 44	42.3
Non volatile matter (%)	≤ 0.05	0.02
Chromatographic purity (%)	≥ 98	99.23
As content (mg/kg)	≤ 3	Conform
Heavy metal (as Pb) (mg/kg)	≤ 10	Conform
Solubility	1g soluble in 5ml of 90% (v/v) alcohol	Conform

DATE OF PURCHASED : 25 July 2024
 DATE OF EXPIRED : 25 October 2026
 BATCH NUMBER : 231026/57090
 CUSTOMER : PT. NUSA KIMIA ABADI
 PURPOSE : COA Order

This document has been electronically produced and does not require any signature

THE REFRESHING NATURE
 PT. Triefta Aroma Nusantara
A Way to go Nature
www.trieftaaromanusantara.com

Lampiran 8. Pengolahan Data Kuesioner

Responden	Rasa			Aroma			warna			tekstur		
	F1	F2	F3	F1	F2	F3	F1	F2	F3	F1	F2	F3
R1	5	5	5	5	4	4	5	5	5	5	5	2
R2	2	4	2	3	3	3	4	5	4	3	5	2
R3	3	4	2	3	4	3	4	5	2	5	4	1
R4	4	5	3	4	3	2	3	5	2	4	5	1
R5	3	5	3	4	4	2	5	5	2	4	4	2
R6	2	5	2	3	3	3	3	5	2	4	4	1
R7	3	4	3	3	3	3	4	4	3	3	4	2
R8	3	5	3	4	4	3	3	4	2	4	5	1
R9	2	4	2	3	4	2	4	5	4	3	5	1
R10	2	5	3	3	4	2	3	4	2	3	5	1
R11	3	4	2	2	3	2	4	5	3	4	5	1
R12	3	4	3	3	3	3	3	5	2	3	4	2
R13	5	5	4	5	3	2	5	4	2	5	5	2
R14	3	4	2	3	3	2	4	4	2	3	5	1
R15	3	5	2	2	4	2	3	5	3	4	4	2
R16	2	3	3	2	3	2	3	5	4	3	5	1
R17	4	4	2	3	4	3	4	4	1	3	5	2
R18	2	5	2	3	3	2	3	5	2	5	5	1
R19	3	4	2	3	3	2	4	5	3	4	5	1
R20	3	5	3	2	3	2	3	4	1	4	5	1
R21	4	5	2	4	3	3	4	5	4	4	5	1
R22	3	4	2	3	3	2	4	4	2	3	5	1
R23	2	4	3	3	3	3	3	5	2	4	4	2
R24	3	5	2	2	3	2	4	4	2	4	5	2
R25	4	4	2	3	3	2	3	5	2	5	5	1
R26	4	5	4	4	4	3	4	5	2	5	4	1
R27	3	4	2	2	3	3	4	4	2	4	5	2
R28	2	4	2	3	3	2	3	4	2	3	5	1
R29	4	5	2	4	4	2	4	4	2	5	5	2
R30	3	5	2	4	3	2	3	4	2	3	4	2
R31	3	4	2	3	3	3	4	4	2	4	5	1
R32	3	4	2	2	3	3	3	4	2	3	4	1
R33	4	5	3	5	4	3	5	5	2	5	4	1
R34	3	4	2	3	3	2	3	5	3	5	5	1
R35	3	5	2	4	4	4	4	4	2	4	4	2
R36	4	4	2	3	4	2	3	5	2	5	5	2
R37	3	4	2	3	3	2	4	4	2	3	5	1
R38	2	3	2	2	4	3	4	5	2	5	4	1
R39	2	4	2	3	3	3	4	4	2	4	5	1
R40	3	5	2	4	4	3	5	5	2	5	5	1
RATA RATA	3.05	4.4	2.425	3.175	3.375	2.525	3.725	4.55	2.35	3.975	4.675	1.375
SD	1.00943466			0.44440972			1.11139927			1.73877351		

Lampiran 9. Hasil Ekstrak Etanol Buah Mengkudu



Penimbangan simplisia



Maserasi Buah Mengkudu



Rotary Evaporator



Ekstrak Kental

Lampiran 10. Hasil Analisa Data ANOVA

1. Uji Keseragaman Bobot

Tests of Normality							
	formula 1,2,3	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
uji keseragaman bobot	1	.304	3	.	.908	3	.411
	2	.218	3	.	.987	3	.784
	3	.349	3	.	.831	3	.190

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

uji keseragaman bobot

Levene Statistic	df1	df2	Sig.
.256	2	6	.782

ANOVA

uji keseragaman bobot

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	2	.001	349.663	.000
Within Groups	.000	6	.000		
Total	.002	8			

2. Uji Disintegrasi

Tests of Normality

	formula 1,2,3	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
uji disintegrasi	1	.219	3	.	.987	3	.780
	2	.292	3	.	.923	3	.463
	3	.253	3	.	.964	3	.637

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

uji disintegrasi

Levene Statistic	df1	df2	Sig.
1.909	2	6	.228

ANOVA

uji disintegrasi

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	247.731	2	123.865	1.429E5	.000
Within Groups	.005	6	.001		
Total	247.736	8			

3. Uji Ketebalan**Tests of Normality**

formula 1,2,3	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
uji ketebalan 1	.175	3	.	1.000	3	1.000
2	.175	3	.	1.000	3	1.000
3	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

uji ketebalan

Levene Statistic	df1	df2	Sig.
.000	2	6	1.000

ANOVA

uji ketebalan

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.035	2	.018	175.000	.000
Within Groups	.001	6	.000		
Total	.036	8			

4. Uji Daya Lipat

Tests of Normality

formula 1,2,3	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
uji daya lipat 1	.175	3	.	1.000	3	1.000
2	.175	3	.	1.000	3	1.000
3	.175	3	.	1.000	3	1.000

a. Lilliefors Significance Correction

Test of Homogeneity of Variances

uji daya lipat

Levene Statistic	df1	df2	Sig.
.000	2	6	1.000

ANOVA

uji daya lipat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	19496.000	2	9748.000	9.748E3	.000
Within Groups	6.000	6	1.000		
Total	19502.000	8			

Lampiran 11. Kuesioner Pendahuluan

Kuesioner Produk *Edible Film Candy*

Identitas Responden

Nama :

Umur :

Beri tanda ✓ untuk jawaban anda

(Skala 1-5, dengan 1 =Tidak suka, 2 = Kurang suka, 3 = Cukup suka, 4 = suka dan 5 = sangat suka).

1. Seberapa suka anda dengan rasa *Edible Film Candy* ini?
 - a) 1
 - b) 2
 - c) 3
 - d) 4
 - e) 5
2. Seberapa suka anda dengan aroma *Edible Film Candy* ini?
 - a) 1
 - b) 2
 - c) 3
 - d) 4
 - e) 5
3. Seberapa suka anda dengan warna *Edible Film Candy* ini ?
 - a) 1
 - b) 2
 - c) 3
 - d) 4
 - e) 5
4. Seberapa suka anda dengan tekstur *Edible Film Candy* ini?
 - a) 1
 - b) 2
 - c) 3
 - d) 4
 - e) 5

Terima Kasih

Terima kasih telah meluangkan waktu untuk mengisi kuesioner ini. Masukan dan pendapat anda sangat berarti bagi penelitian saya.