Lampiran A. Hasil determinasi

HERBARIUM JATINANGOR
LABORATORIUM TAKSONOMI TUMBUHAN
DEPARTEMEN BIOLOGI FMIPA UNPAD
Gedung D2-212, Jl. Raya Bandung Sumedang Km 21 Jatinangor
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LEMBAR IDENTIFIKASI TUMBUHAN
No.040/HB/01/2019

Herbarium Jatinangor, Laboratorium Taksonomi Tumbuhan, Departemen Biologi FMIPA UNPAD, dengan ini menerangkan bahwa :

Nama	: Gina Ginayah Amelliah
NPM	: 11151012
Instansi	: Sekolah Tinggi Farmasi Bandung

Telah melakukan identifikasi tumbuhan, dengan No. Koleksi: -

Tanggal Koleksi	: 15 Januari 2019
Lokasi	: Ciwidey

Hasil Identifikasi,

Nama Ilmiah	: ***Solanum tuberosum L.***
Sinonim	: *Solanum opulens Bukasov*
Nama Lokal	: Kentang
Suku/Famili	: Solanaceae

Klasifikasi (Hirarki Taksonomi)

Kingdom	Plantae
Divisi	Magnoliophyta
Class	Magnoliopsida
Ordo	Solanales
Family	Solanaceae
Genus	Solanum
Species	*Solanum tuberosum L.*

Referensi:

Backer, C. A. and Bakkuizen v/d Brink R. C Jr. 1963. *Flora of Java*. Wolter-Noordhoff NV, Grotingen.

Cronquist, Arthur. 1981. *An Integrated System of Classification of Flowering Plants*. Columbia University Press. New York

The Plant List. *Website Dunia Tumbuhan*. http://www.theplantlist.org/tpl1.1/record/kew-713 . Diakses tanggal, 19 Januari 2019.

Jatinangor, 19 Januari 2019

Identifikator

LABORATORIUM TAKSONOMI TUMBUHAN
JURUSAN BIOLOGI - FMIPA - UNPAD

Drs. Jaka Kusmana, M.P.
NIP. 19600801 199101 1 001

Lampiran B. COA Avicel®102

accent

Quality Control

CERTIFICATE OF ANALYSIS

Product	MICROCRYSTALLINE CELLULOSE BP	Batch no. : 2017151	
Grade	ACCEL 102	Month of Mfg:Jul'2017	
Party Name	Innovis Pharmaceuticals Pvt Ltd.	Month of Exp :Jun'2022	
MOA	USP/NF/JP, Ph.Eur.,BP	Batch Qty:2800 Kgs	

Description	White or almost white. Practically insoluble in water, dilute acid and most of organic solvents. Slightly soluble in dilute NaOH solution	
Pharmacopeial test items	**Batch Results**	**Specification**
Identification A (Zinc Chloride test)	Passes	Have to correspond as USP/NF,JP,Ph.Eur,BP
Identification B (Degree of Polymerization)	Complies	NMT 350 as USP/NF,JP,Ph.Eur,BP
Solubility (cuprammonium solution)	Complies	Have to correspond as Ph. Eur.,BP
pH	6.24	5.0-7.5 as USP/NF,JP,Ph.Eur.,BP
Conductivity	42µS.cm^{-1}	NMT 75 µS.cm^{-1} as USP/NF,JP,Ph.Eur.,BP
Alcoh - Soluble Substance	0.140.0%	NMT 0.25% as USP/NF,JP,Ph.Eur.,BP
Ether - Soluble Substance	0.010.0%	NMT 0.05% as USP/NF,JP,Ph.Eur.,BP
Loss on Drying	4.20%	NMT 5.0% as USP/NF,JP,Ph.Eur.,BP
Heavy Metals	Complies	NMT 10 PPM as USP/NF,JP,Ph.Eur.,BP
Residue on Ignition/Sulphated Ash	0.030.0%	NMT 0.1% as USP/NF,JP,Ph.Eur.,BP

Standards	**Batch Results**	**In house Specification**
Bulk Density	0.32Kg/ltrl	0.28 to 0.48 g/ml
Assay (Dried)	99.21%	97.8% to 102.0%
Sieve Analysis (% Retention)		
60 Mesh	Nil	≤ 8.0%
100 Mesh	18.472.0%	≥45.0%
Particle Size Distribution		
D_{10}	41µ	≤ 40µ
D_{50}	90µ	70 – 180µ
D_{90}	180µ	≥160 µ
MICROBIAL LIMITS		
Total Viable Aerobic Count	45	NMT 1000cfu/g as USP/NF,JP,Ph.Eur.,BP
Total yeast & Mould Count	Nil	NMT 100cfu/g as USP/NF,JP,Ph.Eur.,BP
Staphylococcus aureus	Absent	Absent as USP/NF,JP,Ph.Eur.,BP
Escherichia Coli	Absent	Absent as USP/NF,JP,Ph.Eur.,BP
Pseudomonas aeruginosa	Absent	Absent as USP/NF,JP,Ph.Eur.,BP
Salmonella species	Absent	Absent as USP/NF,JP,Ph.Eur.,BP

The raw materials, manufacturing process, and product do not contain any of solvents listed in Organic Volatile Impurities (USP<467>) & residual solvents (Ph.– Eur.5.4+).

Storage recommendation : Preserve in tight containers.

QUALITY CONTROL DEPT.

Lampiran C. Pembuatan SM *Nata de tuberosum*

		
Kentang yang sudah dikupas, dipotong dan dicuci bersih	Sari kentang	*Nata de tuberosum*
		
Nata de tuberosum menjadi keping selulosa setelah di keringkan	Serbuk selulosa	Alfa selulosa
	SM *Nata de tuberosum* 	

Lampiran D. Uji karakteristik selulosa mikrokristal

Uji organoleptik

SM metode penambahan sukrosa

SM metode penambahan starter

SM metode hidrolisis

Uji identifikasi

SM metode penambahan sukrosa

SM metode penambahan starter

SM metode hidrolisis

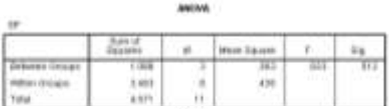
Uji pati

SM metode penambahan sukrosa

SM metode penambahan starter

SM metode hidrolisis

Lampiran E. Uji Statistik



ANOVA

[illegible]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	[illegible]	3	[illegible]	[illegible]	[illegible]
Within Groups	[illegible]	8	[illegible]		
Total	[illegible]	11			

ANOVA

[illegible]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	[illegible]	3	[illegible]	[illegible]	[illegible]
Within Groups	[illegible]	8	[illegible]		
Total	[illegible]	11			

ANOVA

[illegible]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	[illegible]	3	[illegible]	[illegible]	[illegible]
Within Groups	[illegible]	8	[illegible]		
Total	[illegible]	11			

ANOVA

[illegible]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	[illegible]	3	[illegible]	[illegible]	[illegible]
Within Groups	[illegible]	8	[illegible]		
Total	[illegible]	11			

ANOVA

[illegible]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	[illegible]	3	[illegible]	[illegible]	[illegible]
Within Groups	[illegible]	8	[illegible]		
Total	[illegible]	11			

ANOVA

[illegible]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	[illegible]	3	[illegible]	[illegible]	[illegible]
Within Groups	[illegible]	8	[illegible]		
Total	[illegible]	11			

ANOVA

[illegible]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	[illegible]	3	[illegible]	2.113	.177
Within Groups	[illegible]	8	5.047		
Total	[illegible]	11			

ANOVA

[illegible]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	[illegible]	3	[illegible]	1.636	.255
Within Groups	[illegible]	8	[illegible]		
Total	[illegible]	11			

ANOVA

[illegible]

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	21.851	3	7.284	7.274	.011
Within Groups	8.010	8	1.001		
Total	29.862	11			