

**LAMPIRAN A**  
**CONTOH HASIL UJI STATISTIK KESERAGAMAN BOBOT**  
**FORMULA A ANTAR BATCH**

Anova:  
 Single  
 Factor

**SUMMARY**

<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Average</i>	<i>Variance</i>
Column 1	20	78.91214	3.945607	0.108461
Column 2	20	79.66612	3.983306	0.672957

**ANOVA**

<i>Source of Variation</i>	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>P-value</i>	<i>F crit</i>
Between Groups	0.014212	1	0.014212	0.036375	0.849759	4.098172
Within Groups	14.84693	38	0.390709			
Total	14.86114	39				

**PENGUJIAN HIPOTESA:**

- a.  $H_0: \mu = 0$   
 Yang berarti tidak ada perbedaan EFEK yang signifikan sebagai akibat perbedaan perlakuan
- b. **KESIMPULAN:**  
 Karena  $F_{hitung} < F(0,05)$  maka  $H_0$  diterima  
 Dengan perkataan lain perlakuan-perlakuan tidak memberikan perbedaan efek yang signifikan

## LAMPIRAN B

CONTOH PERHITUNGAN DISOLUSI Q<sub>45</sub>

Konsentrasi (µg)	Area	Persamaan regresi
0,0202	7810,7	y=3917,7874x+7776,9942 r <sub>hit</sub> =0,9793(r <sub>tabel</sub> =0,8780)
0,0303	7922,8	
0,0606	8038,6	
0,0909	8154,9	
0,1212	8224,2	

Dengan Konsentrasi sebagai (x) dan area sebagai (y) didapatkan persamaan regresi y=3917,7874x+7776,9942

R hitung = 0,9793

Dari persamaan regresi tersebut dimasukkan area yg di dapatkan dari hasil percobaan disolusi. Kemudian didapatkan konsentrasi (Csebenarnya)

Formul a	No	Area	C sebenarnya a (µg)	Cteoritis s (µg)	% Obat terlarut pada menit 45	$\bar{X} \pm$ SD	SD <sub>rel</sub> (%)
FA	1	8036,7	0,0663	0,0802	83,0097	84,405 6 ± 0,8743	1,0358
	2	8045,3	0,0685	0,0802	85,4500		
	3	8042,6	0,0678	0,0802	84,5878		
	4	8040,3	0,0672	0,0802	83,8045		
	5	8042,6	0,0678	0,0802	84,5771		
	6	8043,8	0,0681	0,0802	85,0045		


C teoritis = 300mg (berat tablet) x 97,7675% (rata2 kadar formula A) x 1,23% (kadar kurkumin dalam tablet secara teoritis)  
= 3,6076 mg/ 900 ml media disolusi  
= 4,0084 µg/ ml

Kemudian ditotolkan sebanyak 20µl = 0,0802 µg/ 20µl

$$\begin{aligned} \% \text{ Obat terlarut pada menit 45} &= \frac{C_{\text{sebenarnya}}}{C_{\text{teoritis}}} \times 100\% \\ &= \frac{0,0663}{0,0802} \times 100\% \\ &= 83,0097\% \end{aligned}$$



**LAMPIRAN C**  
**SERTIFIKAT LAKTOSA**



**DMV INTERNATIONAL**

**Certificate of analysis**

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Issue date : 09.03.2004  
 Purchase order : 002477/FH  
 Delivery item : 80235915 000010  
 Order item : 201632 000010  
 Quantity : 20.000 KG

**Material:**  
 Phaxmatose 200 M.  
 Lactose USP/NF, Ph.Eur, JP  
 In multi layer paper bag with a poly-ethylene innerbag contents 25 kg net.  
**Description:** Lactose Monohydrate USP/NF, Ph.Eur., JP  
 White, crystalline powder, odourless  
**Particle size characteristics:**  
 d10 10 ± 10 µm  
 d50 40 ± 15 µm  
 d90 95 ± 25 µm

Lactose monohydrate min. 99.0 %  
**Identification:** Complies Pharmacopoeia tests

Lot: 10170079  
 Manufacture date: 01.2004      Expiry date: 12.2009

Characteristic	Unit	SPECIFICATION		Value
		Lower Limit	Upper Limit	
Water (KF)	%	4,5	5,5	4,8
Loss on drying	%	0,0	0,5	0,2
Specific rotation 20°C anhydr.	NON	54,4	55,9	54,8
Residue on ignition/Sulph.Ash	%	0,00	0,10	0,04
Absorb.1%, 1 cm at 270-300 nm	NON	0,00	0,07	0,01
Absorb.1%, 1 cm at 210-220 nm	NON	0,00	0,25	0,03
Absorb.10%, 1 cm at 400 nm	NON	0,00	0,04	0,01
Appearance of solution (Ph.Eur Clear and not more coloured than ref.BV7				Passes test
Clarity and Colour of Solution Clear and colourless or nearly colourless				Passes test
Acidity (ml 0.1N NaOH/6g)	ml/6g	0,0	0,2	0,2
Heavy Metals (max. 5 ppm)	%			Passes test
Particle size (PSD) % <45 µm	%		50,0	59,3

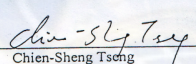



**BRATACO**  
 IMPORTER  
 MANUFACTURER  
 50,0 DISTRIBUTOR 65,0

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**LAMPIRAN D**  
**SERTIFIKAT SSG**

<p><b>YUNG ZIP CHEMICAL IND. CO., LTD.</b> 59, Yu Shih Road Youth Industrial District Tachia, Taiwan, 437 R. O. C.</p> <p>TEL: 886-4-26818780, 26811344      FAX: 886-4-26812911</p>		
<b>CERTIFICATE OF ANALYSIS</b>		
<b><i>D S T</i></b>		
<b>(Sodium Starch Glycolate)</b>		
Lot No.: SSGA02121		Mfg. Date: Nov. 29, 2007
Analysis Following USP 30-NF 25		Exp. Date: Nov. 28, 2010
ITEMS	SPECIFICATIONS	RESULTS
Description	A white, tasteless, odorless, relatively free-flowing powder.	Confirmed
Identification	USP 30/NF 25	Confirmed
Microbial limits	Salmonella E. Coli	Negative Negative
pH	Between 5.5 and 7.5	6.1
Loss on drying	Not more than 10.0 %	2.5 %
Iron	Not more than 0.002 %	Passed
Heavy metals	Not more than 0.002 %	Passed
Sodium chloride	Not more than 7.0 %	4.0 %
Sodium glycolate	Not more than 2.0 %	1.8 %
Assay	Sodium (Na) (2.8% to 4.2%)	3.2 %
<b>Conclusion : Passed</b>		
 Chien-Sheng Tseng Director Quality Assurance		 Date 12/28/2007/40053

**LAMPIRAN E**  
**SERTIFIKAT MAGNESIUM STEARAT**

**GREVEN** QUALITÄTSMANAGEMENT  
Partner der Industrie

**CERTIFICATE OF ANALYSIS**

**customer:** PT. BRATACO  
**contact person:**  
**FAX:** 0062213522734  
**your order-number:** PTB-1393/IV07  
**delivered on:** 14.08.2007  
**brand:** LIGA MAGNESIUM STEARATE MF-2V VEGETABLE  
**our order-number:** 0717837  
**quantity:** 9000  
**charge-no.:** C714048  
**manufacturing date:** 2007-08-07  
**expiry date:** 2009-08-07


The product is in accordance with the USP29/NF24/EP2003/Ph.Eur 6th ed./DAB10/JP 14th. ed./FCC 6th. ed.3

parameter	unit	method	lower	Specification	upper	result
Identification A	atC	Ph.Eur				pass test
Identification B	metal reactio	USP/NF				retentions match
Acidity or	ml 0.01N HCl	Ph.Eur				<0.6
Alkalinity	ml 0.01 N NaOH	Ph.Eur				<0.6
Heavy metals as Pb	ppm	JP				<1
Lead	ppm	BAE 300-B				<1
Cadmium	ppm	BAE 300-B				<1
Nickel	ppm	BAE 300-B				<1
Sulphate	%	Ph.Eur				<0.6
Acid value of the fatty acid	mg KOH/g	Ph.Eur				204.8
Relative content of stearic acid	%	USP/NF				97.8
Rel. cont. of stearic and palmitic acid	%	USP/NF				99.2
Aerobic microbial count	cfu/g	USP/NF				<10
Molds & Yeasts	cfu/g	USP/NF				<10
Escherichia coli	cfu/10g	USP/NF				absent
Salmonella Species	cfu/25g	USP/NF				absent
Organic volatile impurities		USP/NF				meets USP/NF
Loss on drying	%	BAE 600				3.7
Magnesium content	%	BAE 200 o				4.8
Free fatty acid	%	BAE 400				0.6
Sieve residue at 200 mesh	%	BAE 606				0.4
Bulk density tapped	g/ml	BAE 611a				0.35
Specific surface area BET	m <sup>2</sup> /g	USP/NF				8.9
Contamination		BAE 601				In accordance
Chloride	ppm	BAE-627				<100

Y/C REFERENCE AND  
IMPORT APPLICATION NO. 031/030/6217/07B

**PETER GREVEN**  
Peter Greven, Noddastr. 14, Venlo  
Edisonstraat 14, NL-5928 RA Venlo

Venlo, 16.08.07

  
GFS  
604 FN 122-4301

data of the above mentioned delivery are based upon careful test according to the guidelines of our quality assurance system. They do not release the customer from entry control. Besides we do not guarantee special properties for particular applications.  
a certificate was issued electronically and does not bear a signature.

**LAMPIRAN F**  
**SERTIFIKAT TALK**

**LONGGUANG TALC DEVELOPMENT CO., LTD.**  
68 XINGLONGS RD, LONGSHENG COUNTY, GUANGXI P.R. CHINA

**CERTIFICATE OF ANALYSIS**

CERTIFICATE NO.: 45080912  
DATE OF ISSUE: Sep 2, 2007

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NAME OF COMMODITY: OSMANTHUS BRAND TALC POWDER  
PACKING: IN 5-PLY KRAFT PAPER BAGS OF ABOUT 25KGS  
NET EACH  
QUANTITY AND WEIGHT: 13,200BAGS  
330 METRIC TONS NET WEIGHT  
333.96 METRIC TONS GROSS WEIGHT

PRODUCTION LOT NO.: 45GLC0707034C, 0707038G, 0708039G, 0708042G, 0708043G  
CONTRACT NO.: LG107005  
SHIPPING MARKS: N/M

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**REPRESENTATIVE SAMPLES HAVE BEEN DRAWN AT RANDOM AND TESTED WITH RESULTS AS FOLLOWS:**

SIO2: 61.51 % MGO: 31.23 % WHITENESS: 92.14%  
FINENESS: 98.17% PASSING THROUGH 325 MESH.  
LOSS ON IGNITION(1000°C): 5.72%  
MOISTURE: 0.09% WATER SOLUBLE IRON: NEGATIVE  
ACID OR ALKALI: NEUTRAL ACID SOLUBLE SUBSTANCE: 1.7%  
WATER SOLUBLE SUBSTANCE: 0.08%  
TOTAL BACTERIA PER GRAM: 168/G  
ARSENIC: <2PPM LEAD(AS PB): <10PPM  
BULK DENSITY: 0.48G/CM3

**CONCLUSION: OUR ANALYSIS INSPECTION SHOWS THAT THE CARGO IS IN CONFORMITY WITH THE CONTRACT STIPULATIONS.**

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Quality Manager:  Issued by: Longguang Talc Development Co. Ltd

  
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DISTRIBUTOR

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**LAMPIRAN G**  
**SERTIFIKAT PVP K-30**

**BASF Corporation**  
P.O. Box 437, 8404 River Road, Geismar, LA 70734-0437 (225)473-9871

**BASF**  
The Chemical Company

**BASF**  
**CERTIFICATE OF ANALYSIS**

**PVP-IODINE 30/06**  
(POVIDONE-IODINE)

**BASF CORPORATION**  
N-MEN Fine Chemicals  
100 Campus Drive  
Florham Park, N.J. 07832  
USA

Lot Number: **G7085BPZ0**  
Article #: **55097443 (555278-2043)**

Drum Net Weight: **70 KG**  
Purchase Order #:

Manufacturer: **BASF Corporation**  
8404 River Road  
Geismar, LA 70734  
USA

Manufacturing Date: **03/2007** (mm/yyyy)  
Release Date: **29/03/2007** (dd/mm/yyyy)  
Retest Date (USP): **03/2010** (mm/yyyy)

Test	Result	Unit	Specification
Appearance	CONFORMS		Conforms
Solubility	CONFORMS		Conforms
Identification	CONFORMS		Conforms
pH (1.0g in 10 ml water)			Conforms
Iodide Ion	1.7		1.5 - 3.5
Assay-Available Iodine	4.9	%	6.0 max.
Loss on Drying	11.4	%	9.0 - 12.0
Nitrogen Content	2.4	%	6.0 max.
Heavy Metals	10.2	%	9.5 - 11.5
Residue on Ignition (Sulfated Ash)	<10	ppm	10 max.
	<0.025	%	0.025 max.

Only class III solvents are likely to be present (< 0.5%).

The product meets the required current release specifications for the following "Povidone Iodine" monographs: USP, EP, and JP.

Generated by: KV Date: 03-29-07

James Wang / James Wang 3/29/07  
Quality Control  
(225) 339-2146

**megasetia**  
MEGASETIA AGLUNG KIMIA

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**LAMPIRAN H**  
**SERTIFIKAT HPMC**

 Certificate of Analysis <small>Colorcon Asia Pacific Pte Ltd 51 Merchant Road, #03-02 Merchant Square, Singapore 054283 Tel (+65) 438 0318 Fax (+65) 438 0178</small>			
PRODUCT	METHOCEL™ K4M PREMIUM CR EP	BATCH NUMBER	RC29012N11
		DATE OF MANUFACTURE	29-Mar-09


	LIMITS	METHOD	RESULTS	ANALYST
Viscosity, cP (USP)	3000 – 5600	2027	5227	TD
Methoxyl, %	19.0 – 24.0	2028	22.9	TD
Hydroxypropoxyl, %	7.0 – 12.0	2028	8.3	TD
Loss on Drying, %	5.0 max	2029	2.3	TD
Chlorides, %	0.5 max	2031	0.1	TD
Sulphated Ash, %	1.0 max	2032	0.3	TD
Particle Size, % Through No. 40 Sieve	99.0 min	2033	99.5	TD
Particle Size, % Through No. 100 Sieve	90.0 min	2033	91.6	TD
Heavy Metals, ppm (as Pb)	10 max	2034	<10	TD
pH, 1% Soln. in Water	5.5 – 8.0	2036	6.9	TD
Appearance of Soln.	Y-G/S3 max	2037	Passes Test	TD
Viscosity, mPa.s (EP)	2308 – 3755	2027	3566	TD

This material meets all requirements of the current USP and Ph. Eur.

This material passes USP identification tests A,B and C and Ph.Eur identification tests A,B,C,D,E and F.

This material meets USP organic volatile impurity limits. (Process Knowledge).

™Methocel is a trademark of the Dow Chemical Company.

  
**Sagar M. Vichare**  
 B.Sc. (Chemistry)  
 Quality Control Manager

COUNTRY OF ORIGIN      USA  
 USE BY                              27-Mar-09  
 ORDER NUMBER

PLEASE FORWARD THIS CERTIFICATE TO QUALITY CONTROL DEPT.

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## LAMPIRAN I

## SERTIFIKAT IDENTIFIKASI TEMU GIRING



**DINAS KESEHATAN PROPINSI JAWA TIMUR**  
**UPT MATERIA MEDICA**  
 Jalan Lahor No.87 Telp. (0341) 593396 Batu (65313)  
**KOTA BATU**

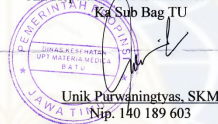
Nomor : 074 / 025 / 101.8 / 2009  
 Sifat : Biasa  
 Perihal : **Determinasi Tanaman Temu Giring**

Memenuhi permohonan saudara  
 Nama : Elen  
 N I M : 2443004011  
 Fakultas : Fakultas Farmasi  
 Universitas Widya Mandala Surabaya

1. Perihal determinasi tanaman Temu Giring
  - Divisi : Spermatophyta
  - Sub divisi : Angiospermae
  - Kelas : Monocotyledonae
  - Bangsa : Zingiberales
  - Suku : Zingiberaceae
  - Marga : Curcuma
  - Jenis : *Curcuma heyneana* Val. & V.Zijp
2. Nama Simplisia : Curcumae heyneanae Rhizoma / Rimpang Temu Giring
3. Kandungan Kimia : Saponin, flavonoida, minyak atsiri, dan zat pati
4. Penggunaan : Penelitian

Demikian determinasi ini kami buat untuk dipergunakan sebagaimana mestinya.

Batu, 24 Februari 2009  
 An. Kepala UPT Materia Medica Batu  
 Kd Sub Bag TU

  
 Unik Purwaningtyas, SKM  
 Nip. 140 189 603

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