LAMPIRAN A

HASIL UJI STATISTIK SUDUT DIAM ANTAR FORMULA

Anova:
Single Factor

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Column 1	3	114.15	38.05	0.8868
Column 2	3	107.84	35.94667	0.448633
Column 3	3	109.27	36.42333	0.004133
Column 4	3	109.4	36.46667	0.000633

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	7.557367	3	2.519122	7.518646	0.010277	4.066181
Within Groups	2.6804	8	0.33505			
Total	10.23777	11				

Keterangan:

Fhitung > Ftabel (0,050) sehingga H ditolak dan ada perbedaan yang bermakna antar formula.

Hasil uji HSD

HSD =	1.16925							
		FI	F II		F III		F IV	
	Mean	38.05	35.9467		36.4233		36.4667	
F I	38.05	0	-2.1033	*	-1.6267	*	-1.5833	*
F II	35.9467		0		0.47667		0.52	
F III	36.4233				0		0.04333	
F IV	36.4667						0	

LAMPIRAN B

HASIL UJI STATISTIK KERAPUHAN GRANUL ANTAR FORMULA

Anova: Single Factor

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Column 1	3	4.6	1.53333	0.12333
Column 2	3	6.9	2.3	0.75
Column 3	3	8.2	2.73333	0.09333
Column 4	3	0.9	0.3	0.01

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	10.24333	3	3.414444	13.98407	0.001512	4.066181
Within Groups	1.953333	8	0.244167			
Total	12.19667	11				

Keterangan:

Fhitung > Ftabel (0,050) sehingga H ditolak dan ada perbedaan yang bermakna antar formula.

Hasil uji HSD

HSD =	0.998147				
		F I	F II	F III	F IV
	Mean	1.533333	2.3	2.733333	0.3
F I	1.533333	0	0.766667	1.2 *	1.23333 *

F II	2.3	0	0.433333	-2	*
F III	2.733333		0	- 2.43333	
F IV	0.3			0	

LAMPIRAN C

HASIL UJI STATISTIK WAKTU LARUT ANTAR FORMULA

Anova: Single Factor

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Column 1	3	4.78	1.593333	0.005033
Column 2	3	5.35	1.783333	0.012233
Column 3	3	4.75	1.583333	0.003233
Column 4	3	5.37	1.79	0.0073

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.118225	3	0.039408	5.670264	0.022208	4.066181
Within Groups	0.0556	8	0.00695			
Total	0.173825	11				

Keterangan:

Fhitung > Ftabel (0,050) sehingga H ditolak dan ada perbedaan yang bermakna antar formula.

Hasil uji HSD

HSD = 0.1684

		F I		F II		F III		F IV	
	Mean	1.59333		1.78333		1.58333		1.79	
F I	1.59333	0		0.19	*	-0.01		0.19667	*
F II	1.78333			0		-0.2	*	0.00667	
F III	1.58333					0		0.20667	
F IV	1.79							0	

LAMPIRAN D

CONTOH PERHITUNGAN

Contoh perhitungan sudut diam:

Formula I:

W persegi panjang = 4,92 gram

W lingkaran = 1,05 gram

Tinggi gundukan granul = 4,95 cm

Luas persegi panjang = 28 x 21,5

= 602 cm^2

$$\text{Luas lingkaran} = \frac{1,05}{4,92} \times 602$$

= 128,48 cm^2

$$r = \sqrt{\frac{Luaslingkaran}{3,14}}$$

$$r = \sqrt{\frac{128,48}{3,14}}$$

= 6,3965 cm

$$\text{tg } \alpha = \frac{\text{tinggi}}{r}$$

$$= \frac{4,95}{6,3965}$$

= 0,7739

α = 37,73°

Contoh perhitungan Carr's Index dan densitas granul:

Formula I:

Berat gelas ukur kosong (W_1) = 104,33 gram

Berat gelas ukur kosong + granul (W_2) = 161,64 gram

V_0 = 100 ml

V = 90 ml

$$\text{Carr's Index (\%)} = \frac{V_0 - V}{V_0} \times 100$$

$$= \frac{100 - 90}{90} \times 100$$

$$= 10{,}00\%$$

Densitas granul:

$$\text{Bobot jenis nyata} = \frac{W_2 - W_1}{100}$$

$$= \frac{161{,}64 - 104{,}33}{100}$$

$$= 0{,}5731$$

$$\text{Bobot jenis mampat} = \frac{W_2 - W_1}{V}$$

$$= \frac{161{,}64 - 104{,}33}{90}$$

$$= 0{,}6368$$

Contoh perhitungan kerapuhan granul:

Formula I:

Berat granul awal (W_0) = 10,00 gram

Berat granul akhir (W) = 9,85 gram

$$\text{Indeks kerapuhan} = \frac{W_0 - W}{W_0} \times 100\%$$

$$= \frac{10 - 9{,}85}{9{,}85} \times 100\%$$

$$= 1{,}52\%$$

LAMPIRAN E

SERTIFIKAT ANALISIS BAHAN

Aloe vera L. *powder extract*:

NATURA
FOOD & NUTRACEUTICAL COMPANY

QA/QC Dept. — Certificate of Analysis

Ref. No. 181/CoA/QC/II/10

Product Name : **Aloe Vera PE**
Product Code : **5018A**
Batch/Lot No. : **10A04D**

Manufacturing date : January 04th 2010
Date of issued : February 10th 2010
Best used before : January 04th 2011

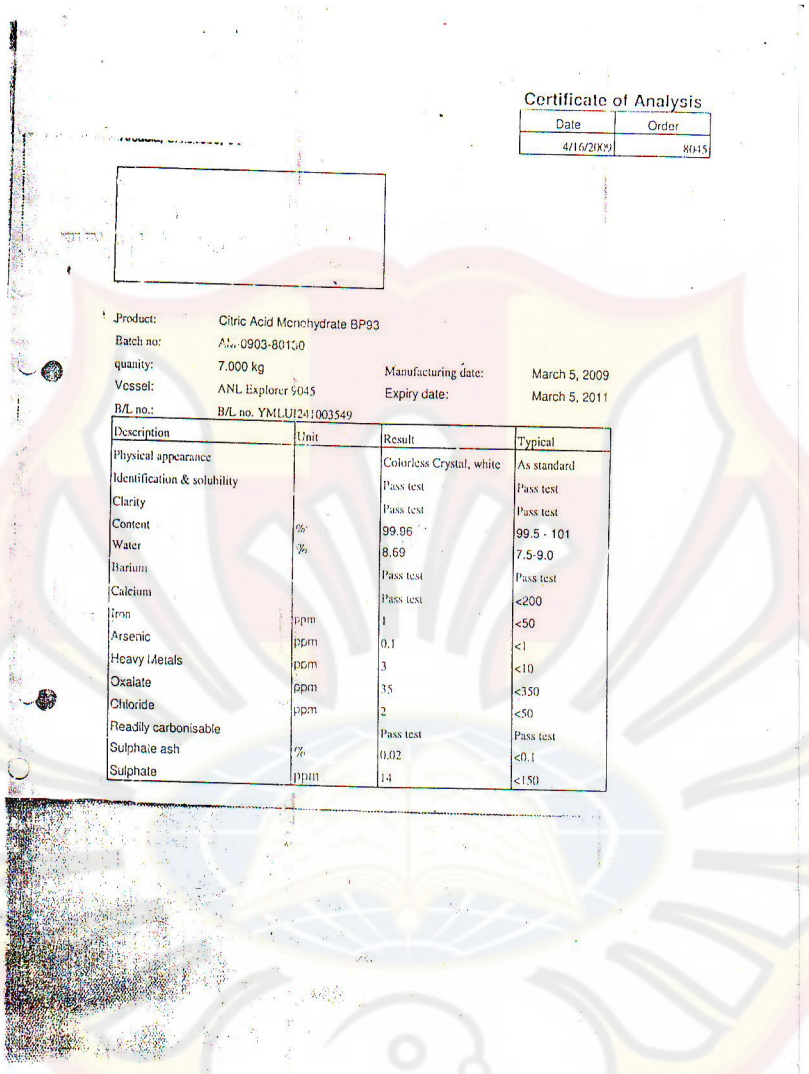
Test Descriptions	Results
Sensory Evaluation	
- Color (Visual)	White
- Appearance (Visual)	Homogeny, fine powder
- Odor and Taste (Smell)	Characteristic odor and taste of *Aloe Vera*
Physicochemical	
- Solubility (1 % soluble in water)	Soluble in water
- Particle Size (Sieve thru mesh #100)	99,36 %
- Lost On Drying (IR/105 °C)	3,77 %
- Tapped Density	0,5442 g/ml
- pH at 25 °C (1.0 % solution)	5,23
Toxicological	
- Aerobic Plate Count (Ph)	$2{,}4.10^{2}$ cfu/g
- Yeast and Mold (Ph)	$1{,}2.10^{2}$ cfu/g
- E. Coli (Ph)	Negative
- Salmonella sp. (Ph)	Negative

`Dewi Alletasari H – QA/QC Dept. :

NATURA LABORATORIA PRIMA pt.

Office : Jl. Suryopranoto, Kompleks Harmoni Plaza Blok J3-J4, Jakarta 10130 - Indonesia
Ph. +62-21-6318949(hunting), Fax. +62-21-6318948
Factory & Extraction Center : Jl. Stadion No. 26, Pandaan, Pasuruan 67156, East Java - Indonesia
Ph. +62-343-633432,633433 Fax. +62-343-633435
e-mail : info@natura-lab.com
Website : http://www.natura-lab.com

Asam sitrat:



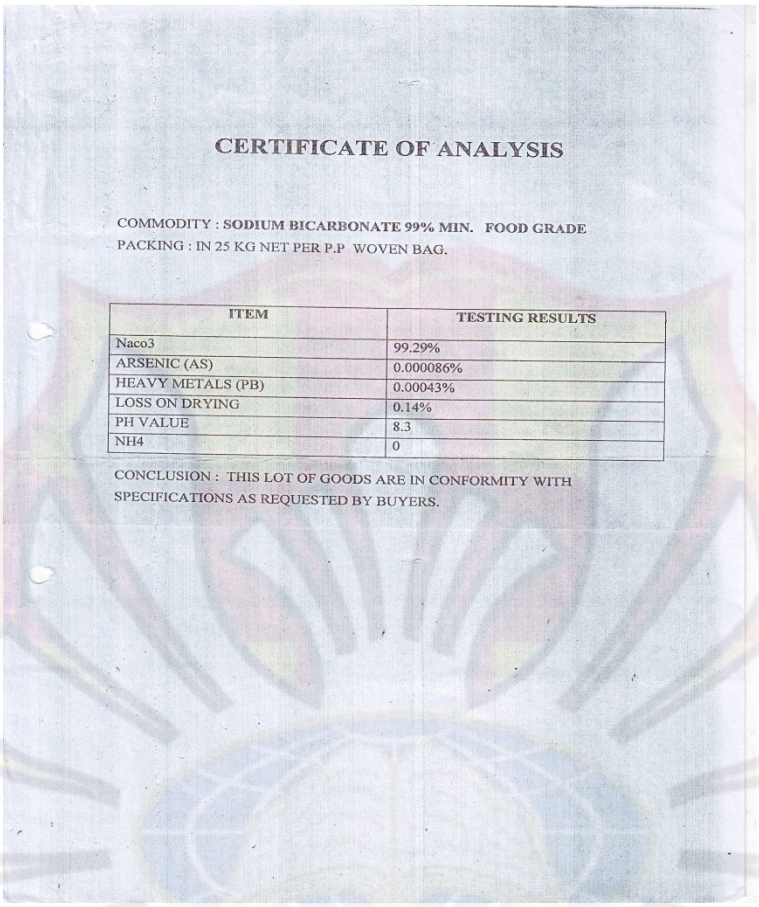
Certificate of Analysis

Date	Order
4/16/2009	8045

Product: Citric Acid Monohydrate BP93
Batch no: AN: 0903-80130
quanity: 7.000 kg
Vessel: ANL Explorer 8045
B/L no.: B/L no. YMLUI241003549
Manufacturing date: March 5, 2009
Expiry date: March 5, 2011

Description	Unit	Result	Typical
Physical appearance		Colorless Crystal, white	As standard
Identification & solubility		Pass test	Pass test
Clarity		Pass test	Pass test
Content	%	99.96	99.5 - 101
Water	%	8.69	7.5-9.0
Barium		Pass test	Pass test
Calcium		Pass test	<200
Iron	ppm	1	<50
Arsenic	ppm	0.1	<1
Heavy Metals	ppm	3	<10
Oxalate	ppm	35	<350
Chloride	ppm	2	<50
Readily carbonisable		Pass test	Pass test
Sulphate ash	%	0.02	<0.1
Sulphate	ppm	14	<150

Natrium bikarbonat:



CERTIFICATE OF ANALYSIS

COMMODITY : **SODIUM BICARBONATE 99% MIN. FOOD GRADE**
PACKING : IN 25 KG NET PER P.P WOVEN BAG.

ITEM	TESTING RESULTS
Naco3	99.29%
ARSENIC (AS)	0.000086%
HEAVY METALS (PB)	0.00043%
LOSS ON DRYING	0.14%
PH VALUE	8.3
NH4	0

CONCLUSION : THIS LOT OF GOODS ARE IN CONFORMITY WITH SPECIFICATIONS AS REQUESTED BY BUYERS.

PVP K-30:

BASF
The Chemical Company

Division: G-EMP

KOLLIDON® 30
POLYVINYL PYRROLIDONE

CERTIFICATE OF ANALYSIS

BASF CORPORATION
Care Chemicals / Pharma Ingredients
100 Campus Drive
Florham Park, N.J. 07932
USA

Lot Number: G91927PT0
Article #: 55087337

Drum Net Weight: 50 KG
Purchase Order #:

Manufacturer: BASF Corporation
8404 River Road
Geismar, LA 70734

Manufacturing Date 07.2009 (mm.yyyy)
Release Date 27.7.2009 (dd.mm.yyyy)
Retest Date 07.2012 (mm.yyyy)

Test	Result	Unit	Specification
Identification - IR Scan	Complies		Must Comply
Identification - Dichromate Test	Complies		Must Comply
Identification - Iodine Test	Complies		Must Comply
Appearance	Complies		Must Comply
Appearance of Solution (5% in water)	Complies		Must Comply
Solubility	Complies		Must Comply
pH (5% in water)	3.5		3.0-5.0
Water	3.3	%	5.0 Max.
Residue on Ignition / Sulphated ash	<0.1	%	0.1 Max.
Lead	<5	ppm	5 Max.
Heavy Metals	<5	ppm	5 Max.
Aldehydes as Acetaldehyde	81	ppm	500 Max.
Peroxides	29	ppm	400 Max.
Residual Solvent (Class III) as Formic Acid	<0.5	%	0.5 Max.
Hydrazine	<1	ppm	1 Max.
N-vinylpyrrolidone (Impurity A)	<1	ppm	10 Max.
Pyrrolidone (Impurity B)	1	%	3 Max.
K-Value	30.5		27.0 - 32.4
Nitrogen (Anhydrous basis)	12.5	%	11.5 - 12.8
Microbiological Quality	Complies		Must Comply

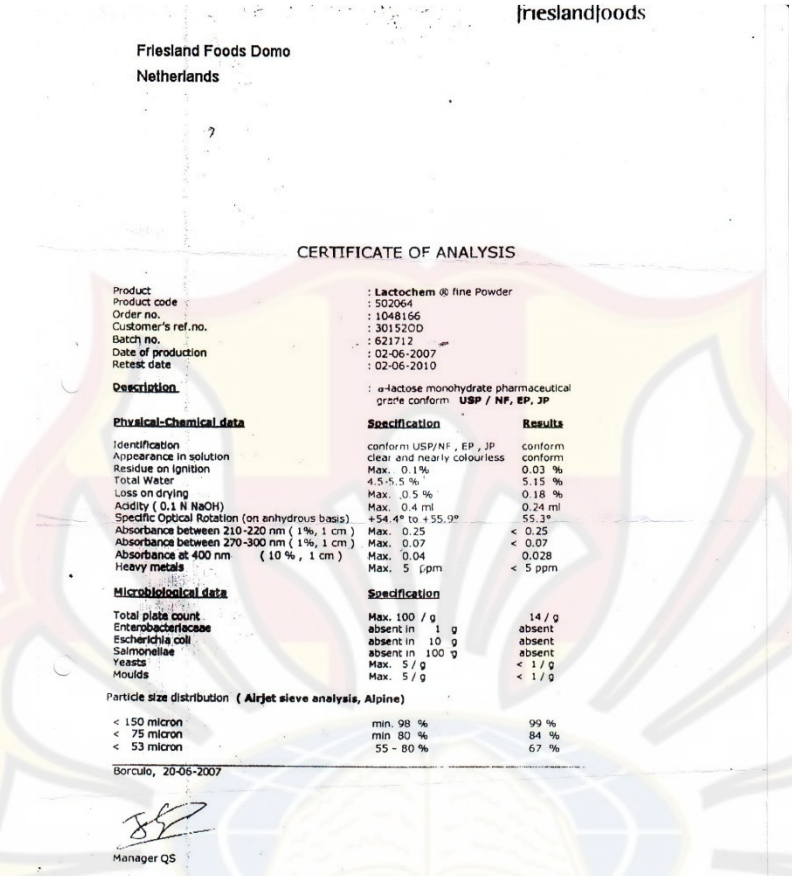
Kollidon® 30 meets the requirements of the current monographs for "Povidone" in USP, Ph. Eur. and JP.

Generated by : _____ Date: 7/27/09

Linda M. Gardemal / 07/28/09
Quality Control
(225) 339-2146

megAsetia
PT. MEGASETIA AGUNG KIMIA

Laktosa monohidrat:



frieslandfoods

Friesland Foods Domo
Netherlands

CERTIFICATE OF ANALYSIS

Product	: **Lactochem** ® fine Powder
Product code	: 502064
Order no.	: 1048166
Customer's ref.no.	: 301520D
Batch no.	: 621712
Date of production	: 02-06-2007
Retest date	: 02-06-2010
Description	: α-lactose monohydrate pharmaceutical grade conform **USP / NF, EP, JP**

Physical-Chemical data	**Specification**	**Results**
Identification	conform USP/NF , EP , JP	conform
Appearance in solution	clear and nearly colourless	conform
Residue on ignition	Max. 0.1%	0.03 %
Total Water	4.5-5.5 %	5.15 %
Loss on drying	Max. 0.5 %	0.18 %
Acidity (0.1 N NaOH)	Max. 0.4 ml	0.24 ml
Specific Optical Rotation (on anhydrous basis)	+54.4° to +55.9°	55.3°
Absorbance between 210-220 nm (1%, 1 cm)	Max. 0.25	< 0.25
Absorbance between 270-300 nm (1%, 1 cm)	Max. 0.07	< 0.07
Absorbance at 400 nm (10 % , 1 cm)	Max. 0.04	0.028
Heavy metals	Max. 5 ppm	< 5 ppm

Microbiological data	**Specification**	
Total plate count	Max. 100 / g	14 / g
Enterobacteriacae	absent in 1 g	absent
Escherichia coli	absent in 10 g	absent
Salmonellae	absent in 100 g	absent
Yeasts	Max. 5 / g	< 1 / g
Moulds	Max. 5 / g	< 1 / g

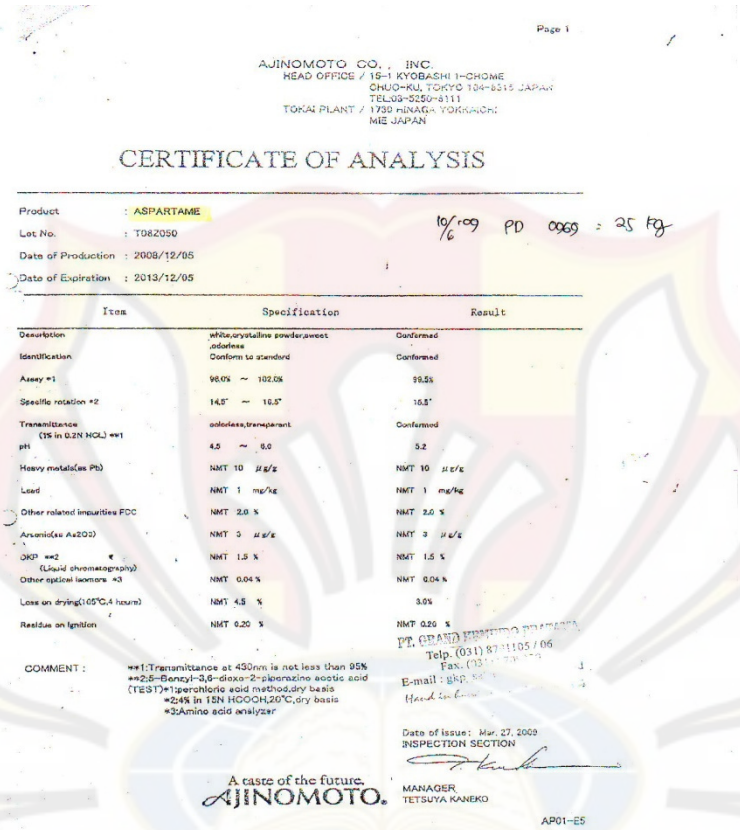
Particle size distribution **(Airjet sieve analysis, Alpine)**

< 150 micron	min. 98 %	99 %
< 75 micron	min 80 %	84 %
< 53 micron	55 - 80 %	67 %

Borculo, 20-06-2007

Manager QS

Aspartam:



Page 1

AJINOMOTO CO., INC.
HEAD OFFICE / 15-1 KYOBASHI 1-CHOME
CHUO-KU, TOKYO 104-8315 JAPAN
TEL.03-5250-8111
TOKAI PLANT / 1730 HINAGA YOKKAICHI
MIE JAPAN

CERTIFICATE OF ANALYSIS

Product : ASPARTAME
Lot No. : T08Z050
Date of Production : 2008/12/05
Date of Expiration : 2013/12/05

10/6-09 PD 0069 : 25 kg

Item	Specification	Result
Description	white,crystalline powder,sweet ,odorless	Conformed
Identification	Conform to standard	Conformed
Assay *1	98.0% ~ 102.0%	99.5%
Specific rotation *2	14.5° ~ 16.5°	15.8°
Transmittance (1% in 0.2N HCL) *1	colorless,transparent	Conformed
pH	4.5 ~ 5.0	5.2
Heavy metals(as Pb)	NMT 10 μg/g	NMT 10 μg/g
Lead	NMT 1 mg/kg	NMT 1 mg/kg
Other related impurities FDC	NMT 2.0 %	NMT 2.0 %
Arsenic(as As2O3)	NMT 3 μg/g	NMT 3 μg/g
DKP *2 (Liquid chromatography)	NMT 1.5 %	NMT 1.5 %
Other optical isomers *3	NMT 0.04 %	NMT 0.04 %
Loss on drying(105°C,4 hours)	NMT 4.5 %	3.0%
Residue on ignition	NMT 0.20 %	NMT 0.20 %

COMMENT : *1:Transmittance at 430nm is not less than 95%
*2:5-Benzyl-3,6-dioxo-2-piperazino acetic acid (TEST)*1:perchloric acid method,dry basis
*2:4% in 15N HCOOH,20°C,dry basis
*3:Amino acid analyzer

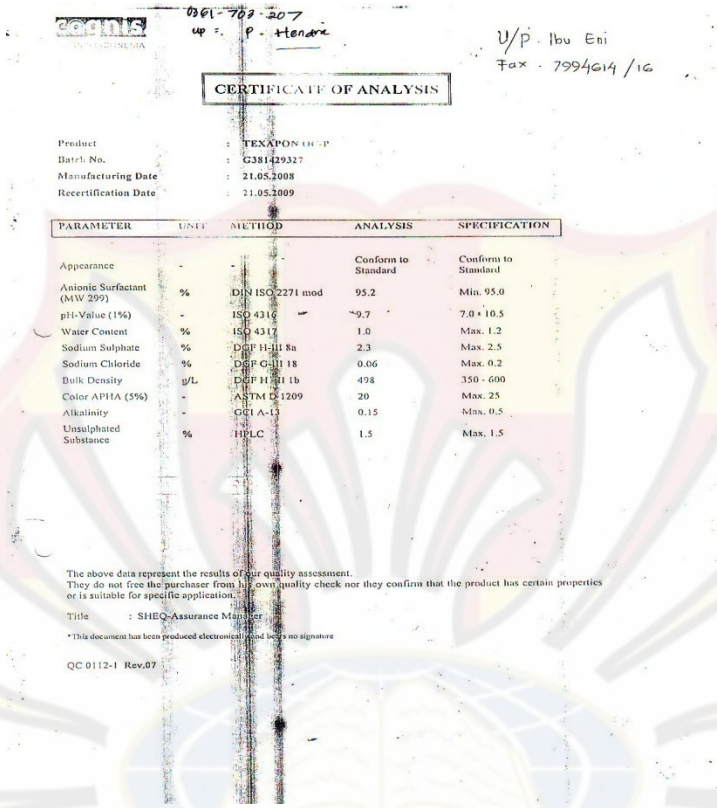
PT. GRAND [illegible]
Telp. (031) 87[illegible]05 / 06
Fax. (03[illegible]
E-mail : gkp.[illegible]

Date of issue: Mar. 27, 2009
INSPECTION SECTION
MANAGER
TETSUYA KANEKO

A taste of the future.
AJINOMOTO.

AP01-E5

Sodium lauril sulfat:



0361-703-207
up : P - Hendra

U/P . Ibu Eni
Fax . 7994614 / 16

CERTIFICATE OF ANALYSIS

Product : TEXAPON OCP
Batch No. : G381429327
Manufacturing Date : 21.05.2008
Recertification Date : 21.05.2009

PARAMETER	UNIT	METHOD	ANALYSIS	SPECIFICATION
Appearance	-	-	Conform to Standard	Conform to Standard
Anionic Surfactant (MW 299)	%	DIN ISO 2271 mod	95.2	Min. 95.0
pH-Value (1%)	-	ISO 4316	9.7	7.0 - 10.5
Water Content	%	ISO 4317	1.0	Max. 1.2
Sodium Sulphate	%	DGF H-III 8a	2.3	Max. 2.5
Sodium Chloride	%	DGF G-III 18	0.06	Max. 0.2
Bulk Density	g/L	DGF H-III 1b	498	350 - 600
Color APHA (5%)	-	ASTM D-1209	20	Max. 25
Alkalinity	-	GCI A-13	0.15	Max. 0.5
Unsulphated Substance	%	HPLC	1.5	Max. 1.5

The above data represent the results of our quality assessment.
They do not free the purchaser from his own quality check nor they confirm that the product has certain properties or is suitable for specific application.

Title : SHEQ-Assurance Manager

*This document has been produced electronically and bears no signature

QC 0112-1 Rev.07

LAMPIRAN F

TABEL UJI r

DEGREES OF FREEDOM (DF)	5 PERCENT	1 PERCENT	DEGREES OF FREEDOM (DF)	5 PERCENT	1 PERCENT
1	.997	.1.000	24	.388	.496
2	.950	.990	25	.381	.487
3	.878	.959	26	.374	.478
4	.811	.917	27	.367	.470
5	.754	.874	28	.361	.463
6	.707	.834	29	.355	.456
7	.666	.798	30	.349	.449
8	.632	.765	35	.325	.418
9	.602	.735	40	.304	.393
10	.576	.708	48	.288	.372
11	.553	.684	50	.273	.354
12	.532	.661	60	.250	.325
13	.514	.641	70	.232	.302
14	.497	.623	80	.217	.283
15	.482	.606	90	.205	.267
16	.468	.590	100	.195	.254
17	.456	.575	125	.174	.228
18	.444	.561	150	.159	.208
19	.433	.549	200	.138	.181
20	.423	.537	300	.113	.148
21	.413	.526	400	.098	.128
22	.404	.515	500	.088	.115
23	.396	.505	1000	.062	.081

Dikutip dari: Soedigdo & Soedigdo (1977)

LAMPIRAN G

TABEL UJI HSD (0,05)

d.k. \ k	2	3	4	5	6	7	8	9	10	11
5	3.64	4.60	5.22	5.67	6.03	6.33	6.58	6.80	6.99	7.17
6	3.46	4.34	4.90	5.30	5.63	5.90	6.12	6.32	6.49	6.65
7	3.34	4.16	4.68	5.06	5.36	5.61	5.82	6.00	6.16	6.30
8	3.26	4.04	4.53	4.89	5.17	5.40	5.60	5.77	5.92	6.05
9	3.20	3.95	4.41	4.76	5.02	5.24	5.43	5.59	5.74	5.87
10	3.15	3.88	4.33	4.65	4.91	5.12	5.30	5.46	5.60	5.72
11	3.11	3.82	4.26	4.57	4.82	5.03	5.20	5.35	5.49	5.61
12	3.08	3.77	4.20	4.51	4.75	4.95	5.12	5.27	5.39	5.51
13	3.06	3.73	4.15	4.45	4.69	4.88	5.05	5.19	5.32	5.43
14	3.03	3.70	4.11	4.41	4.64	4.83	4.99	5.13	5.25	5.36
15	3.01	3.67	4.08	4.37	4.59	4.78	4.94	5.08	5.20	5.31
16	3.00	3.65	4.05	4.33	4.56	4.74	4.90	5.03	5.15	5.26
17	2.98	3.63	4.02	4.30	4.52	4.71	4.86	4.99	5.11	5.21
18	2.97	3.61	4.00	4.28	4.49	4.67	4.82	4.96	5.07	5.17
19	2.96	3.59	3.98	4.25	4.47	4.65	4.79	4.92	5.04	5.14
20	2.95	3.58	3.96	4.23	4.45	4.62	4.77	4.90	5.01	5.11
24	2.92	3.53	3.90	4.17	4.37	4.54	4.68	4.81	4.92	5.01
30	2.89	3.49	3.85	4.10	4.30	4.46	4.60	4.72	4.82	4.92
40	2.86	3.44	3.79	4.04	4.23	4.39	4.52	4.63	4.73	4.82
60	2.83	3.40	3.74	3.98	4.16	4.31	4.44	4.55	4.65	4.73
120	2.80	3.36	3.68	3.92	4.10	4.24	4.36	4.47	4.56	4.64
∞	2.77	3.31	3.63	3.86	4.03	4.17	4.29	4.39	4.47	4.55

Catatan kaki: Dari *Annals of mathematical statistics.* Diulang cetak seizin penerbit, The Institute of Mathematical Statistics.

Sumber: Schefler (1987).

LAMPIRAN H

HASIL UJI STATISTIK PERCOBAAN DAN TEORITIS SUDUT DIAM

Anova: Single Factor

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Column 1	4	146.89	36.7225	0.838092
Column 2	4	145.81	36.4525	0.000558

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.1458	1	0.1458	0.347702	0.576931	5.987377584
Within Groups	2.51595	6	0.419325			
Total	2.66175	7				

LAMPIRAN I

HASIL UJI STATISTIK PERCOBAAN DAN TEORITIS KERAPUHAN GRANUL

Anova: Single Factor

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Column 1	4	6.86	1.715	1.1363
Column 2	4	2.81	0.7025	0.093425

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	2.050313	1	2.050313	3.334587	0.117624	5.987377584
Within Groups	3.689175	6	0.614863			
Total	5.739488	7				

LAMPIRAN J

HASIL UJI STATISTIK PERCOBAAN DAN TEORITIS WAKTU LARUT

Anova: Single Factor

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Column 1	4	6.74	1.685	0.013367
Column 2	4	7.06	1.765	0.0003

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0.0128	1	0.0128	1.873171	0.220141	5.987377584
Within Groups	0.041	6	0.006833			
Total	0.0538	7				

LAMPIRAN K

HASIL UJI ANAVA SUDUT DIAM GRANUL DENGAN *DESIGN-EXPERT*

Use your mouse to right click on individual cells for definitions.

Response 1 Sudut diam

ANOVA for selected factorial model

Analysis of variance table [Partial sum of squares - Type III]

Source	Sum of Squares	df	Mean Square	F Value	p-value Prob > F	
Model	7.54726667	3	2.515755556	7.507477	0.0103	significant
A-PVP K-30	3.16213333	1	3.162133333	9.4363871	0.0153	
B-Laktosa monohidrat	0.9075	1	0.9075	2.7081468	0.1385	
AB	3.47763333	1	3.477633333	10.377897	0.0122	
Pure Error	2.6808	8	0.3351			
Cor Total	10.2280667	11				

The Model F-value of 7.51 implies the model is significant. There is only a 1.03% chance that a "Model F-Value" this large could occur due to noise.

Values of "Prob > F" less than 0.0500 indicate model terms are significant.
In this case A, AB are significant model terms.
Values greater than 0.1000 indicate the model terms are not significant.

If there are many insignificant model terms (not counting those required to support hierarchy), model reduction may improve your model.

Std. Dev.	0.57887823	R-Squared	0.7378977
Mean	36.7233333	Adj R-Squared	0.6396093
C.V. %	1.57632266	Pred R-Squared	0.4102698
PRESS	6.0318	Adeq Precision	6.2933447

The "Pred R-Squared" of 0.4103 is not as close to the "Adj R-Squared" of 0.6396 as one might normally expect. This may indicate a large block effect or a possible problem with your model and/or data. Things to consider are model reduction, response tranformation, outliers, etc.

"Adeq Precision" measures the signal to noise ratio. A ratio greater than 4 is desirable. Your ratio of 6.293 indicates an adequate signal. This model can be used to navigate the design space.

Factor	Coefficient Estimate	df	Standard Error	95% CI Low	95% CI High	VIF
Intercept	36.7233333	1	0.16710775	36.337982	37.10868449	
A-PVP K-30	-0.5133333	1	0.16710775	-0.8986845	-0.127982175	1
B-Laktosa monohidrat	-0.275	1	0.16710775	-0.6603512	0.110351158	1
AB	0.53833333	1	0.16710775	0.1529822	0.923684492	1

Final Equation in Terms of Coded Factors:

Sudut diam =
36.7233333
-0.5133333 * A
-0.275 * B
0.53833333 * A * B

Final Equation in Terms of Actual Factors:

Sudut diam =
36.7233333
-0.5133333 * PVP K-30
-0.275 * Laktosa monohidrat
0.53833333 * PVP K-30 * Laktosa monohidrat

The Diagnostics Case Statistics Report has been moved to the Diagnostics Node.
In the Diagnostics Node, Select Case Statistics from the View Menu.

Proceed to Diagnostic Plots (the next icon in progression). Be sure to look at the:
1) Normal probability plot of the studentized residuals to check for normality of residuals.
2) Studentized residuals versus predicted values to check for constant error.
3) Externally Studentized Residuals to look for outliers, i.e., influential values.
4) Box-Cox plot for power transformations.

If all the model statistics and diagnostic plots are OK, finish up with the Model Graphs icon.

LAMPIRAN L

HASIL UJI ANAVA KERAPUHAN GRANUL DENGAN *DESIGN-EXPERT*

Use your mouse to right click on individual cells for definitions.

Response 2 Kerapuhan

ANOVA for selected factorial model

Analysis of variance table [Partial sum of squares - Type III]

Source	Sum of Squares	df	Mean Square	F Value	p-value Prob > F	
Model	10.24333	3	3.414444444	13.98407	0.0015	significant
A-PVP K-30	2.083333	1	2.083333333	8.532423	0.0193	
B-Laktosa monohidrat	0.48	1	0.48	1.96587	0.1985	
AB	7.68	1	7.68	31.45392	0.0005	
Pure Error	1.953333	8	0.244166667			
Cor Total	12.19667	11				

The Model F-value of 13.98 implies the model is significant. There is only
a 0.15% chance that a "Model F-Value" this large could occur due to noise.
Values of "Prob > F" less than 0.0500 indicate model terms are significant.
In this case A, AB are significant model terms.
Values greater than 0.1000 indicate the model terms are not significant.
If there are many insignificant model terms (not counting those required to support hierarchy),

model reduction may improve your model.

Std. Dev.	0.494132	R-Squared	0.839847
Mean	1.716667	Adj R-Squared	0.77979
C.V. %	28.7844	Pred R-Squared	0.639656
PRESS	4.395	Adeq Precision	8.529411

The "Pred R-Squared" of 0.6397 is in reasonable agreement with the "Adj R-Squared" of 0.7798.

"Adeq Precision" measures the signal to noise ratio. A ratio greater than 4 is desirable. Your ratio of 8.529 indicates an adequate signal. This model can be used to navigate the design space.

Factor	Coefficient Estimate	df	Standard Error	95% CI Low	95% CI High	VIF
Intercept	**1.716667**	**1**	**0.14264369**	**1.38773**	**2.0456036**	
A-PVP K-30	**-0.416667**	**1**	**0.14264369**	**-0.745604**	**-0.0877297**	**1**
B-Laktosa monohidrat	-0.2	1	0.14264369	-0.52894	0.12893694	1
AB	-0.8	1	0.14264369	-1.12894	-0.4710631	1

Final Equation in Terms of Coded Factors:

Kerapuhan **=**
1.716667
-0.416667 * A

-0.2	* B
-0.8	* A * B

Final Equation in Terms of Actual Factors:

Kerapuhan	=
1.716667	
-0.416667	* PVP K-30
-0.2	* Laktosa monohidrat
-0.8	* PVP K-30 * Laktosa monohidrat

The Diagnostics Case Statistics Report has been moved to the Diagnostics Node.
In the Diagnostics Node, Select Case Statistics from the View Menu.

Proceed to Diagnostic Plots (the next icon in progression). Be sure to look at the:
1) Normal probability plot of the studentized residuals to check for normality of residuals.
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3) Externally Studentized Residuals to look for outliers, i.e., influential values.
4) Box-Cox plot for power transformations.

If all the model statistics and diagnostic plots are OK, finish up with the Model Graphs icon.

LAMPIRAN M

HASIL UJI ANAVA WAKTU LARUT GRANUL DENGAN *DESIGN-EXPERT*

Use your mouse to right click on individual cells for definitions.

Response 4 Waktu larut

ANOVA for selected factorial model

Analysis of variance table [Partial sum of squares - Type III]

Source	Sum of Squares	df	Mean Square	F Value	p-value Prob > F	
Model	0.118225	3	0.03941	5.67026	0.0222	significant
A-PVP K-30	0.11800833	1	0.11801	16.9796	0.0033	
B-Laktosa monohidrat	8.3333E-06	1	8.3E-06	0.0012	0.9732	
AB	0.00020833	1	0.00021	0.02998	0.8668	
Pure Error	0.0556	8	0.00695			
Cor Total	0.173825	11				

The Model F-value of 5.67 implies the model is significant. There is only a 2.22% chance that a "Model F-Value" this large could occur due to noise.

Values of "Prob > F" less than 0.0500 indicate model terms are significant.
In this case A are significant model terms.
Values greater than 0.1000 indicate the model terms are not significant.

If there are many insignificant model terms (not counting those required to support hierarchy), model reduction may improve your model.

Std. Dev.	0.08336666	R-Squared	0.68014
Mean	1.6875	Adj R-Squared	0.56019
C.V. %	4.94024652	Pred R-Squared	0.28031
PRESS	0.1251	Adeq Precision	4.29377

The "Pred R-Squared" of 0.2803 is not as close to the "Adj R-Squared" of 0.5602 as one might normally expect. This may indicate a large block effect or a possible problem with your model and/or data. Things to consider are model reduction, response tranformation, outliers, etc.

"Adeq Precision" measures the signal to noise ratio. A ratio greater than 4 is desirable. Your ratio of 4.294 indicates an adequate signal. This model can be used to navigate the design space.

Factor	Coefficient Estimate	df	Standard Error	95% CI Low	95% CI High	VIF
Intercept	1.6875	1	0.02407	1.632	1.743	
A-PVP K-30	0.09916667	1	0.02407	0.04367	0.15466	1
B-Laktosa monohidrat	-0.0008333	1	0.02407	-0.0563	0.05466	1
AB	0.00416667	1	0.02407	-0.0513	0.05966	1

Final Equation in Terms of Coded Factors:

Waktu larut	=
1.6875	
0.09916667	* A
-0.0008333	* B
0.00416667	* A * B

Final Equation in Terms of Actual Factors:

Waktu larut	=
1.6875	
0.09916667	* PVP K-30
-0.0008333	* Laktosa monohidrat
0.00416667	* PVP K-30 * Laktosa monohidrat

The Diagnostics Case Statistics Report has been moved to the Diagnostics Node.
In the Diagnostics Node, Select Case Statistics from the View Menu.

Proceed to Diagnostic Plots (the next icon in progression). Be sure to look at the:
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3) Externally Studentized Residuals to look for outliers, i.e., influential values.
4) Box-Cox plot for power transformations.

If all the model statistics and diagnostic plots are OK, finish up with the Model Graphs icon.

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SURABAYA