

# Certificate of Analysis

## Patchouli Oil & Citronella Oil

laboratory test results:

**23 September 2021**

Citronella Content : 52.33%

Patchouli Alcohol Content : 37.41%

**12 January 2022**

Citronella Content : 40.72%

Patchouli Alcohol Content : 30%

**SURYA AGRO  
NUSANTARA**

[WWW.SURYAAGRONUSANTARA.COM](http://WWW.SURYAAGRONUSANTARA.COM)



PEMERINTAH PROVINSI SUMATERA BARAT  
DINAS PERINDUSTRIAN DAN PERDAGANGAN  
UPTD BALAI PENGUJIAN DAN SERTIFIKASI MUTU BARANG  
Jl. Belibis Air Tawar No. 3 Telp. (0751) 7054202 Fax. (0751) 7053484 Kotak Pos 65, Padang

**LAPORAN HASIL ANALISA**

*Report of Analysis*

Nomor : 05/BPSMB-LHA/1/2022

Pemilik /Eksportir : **CV. SURYA AGRO NUSANTARA**  
*Owner / Exporter*  
Alamat : Jl. Tuanku Sasak Katimaha, Pasaman Barat  
*Address*  
Contoh : Minyak Sereh / 03/MS/22  
*Sample*  
Tanggal Terima : January 05, 2022  
*Date of received*  
Tanggal Pengujian : January 10-11, 2022  
*Date of analysis*  
Metode Pengujian : SNI 06-3953-1995 / Sereh  
*Methods of analysis*

**HASIL  
RESULT**

NO	KARAKTERISTIK <i>Specification</i>	UNIT <i>Unit</i>	HASIL PENGUJIAN <i>Test Result</i>	PERSYARATAN SNI <i>SNI Requirement</i>
1	Warna <i>Colour</i>	--	Bening	Kuning Pucat-sampai Kecoklatan
2	Bobot Jenis <i>Specific Gravity</i>	--	0.881	0.880 - 0.922
3	Indeks Bias <i>Refractive Index</i>	--	1.466	1.466 - 1.475
4	Kelarutan Dalam Etanol 80 % <i>Soluble in 80 % Etanol</i>	--	1:1, Jernih	1:2 Jernih, seterusnya jernih
5	Geraniol <i>Geraniol</i>	%	21.31	Min. 85
6	Sitronellal <i>Sitronellal</i>	%	40.72	Min. 35
7	Bau <i>Odor</i>		Segar, khas Minyak Sereh	Segar, khas Minyak Sereh
8	Putaran Optik <i>Optical Rotation</i>	--	( - ) 3.20°	( 0° ) - ( - 6° )

Catatan : Hasil analisa hanya berdasarkan contoh yang diterima  
*Notice : This report is based on the testing sample only*

Padang, January 12, 2022

Regional Laboratory  
For Testing and Quality Certification

**DARMAN, ST. MM**  
Head of the Laboratory



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**LAPORAN HASIL ANALISA**

*Report of Analysis*

Nomor : 06/BPSMB-LHA/1/2022

Pemilik /Eksportir : **CV. Surya Agro Nusantara**  
*Owner / Exporter*  
Alamat : Jl. Tuanku Sasak. Kec. Pasaman, Pasaman Barat  
*Address*  
Contoh : Minyak Nilam / 02/PO/22  
*Sample*  
Tanggal Terima : January 05, 2022  
*Date of received*  
Tanggal Pengujian : January 10-11, 2022  
*Date of analysis*  
Metode Pengujian : SNI 06-2385-2006  
*Methods of analysis*

**HASIL  
RESULT**

NO	KARAKTERISTIK <i>Specification</i>	UNIT <i>Unit</i>	HASIL PENGUJIAN <i>Test Result</i>	PERSYARATAN SNI <i>SNI Requirement</i>
1	Warna <i>Colour</i>	--	Kuning Kecoklatan	Kuning Muda - Coklat Kemerahan <i>Light Yellow to Reddish Brown</i>
2	Bobot Jenis <i>Specific Gravity</i>	--	0.954	0.950 - 0.975
3	Indeks Bias <i>Refractive Index</i>	--	1.507	1.507 - 1.515
4	Kelarutan Dalam Etanol 90 % <i>Soluble in 90 % Etanol</i>	--	1:10, Jernih	1 : 10, Jernih, seterusnya jernih <i>Soluble or soluble with slight opalescence in 1 : 10 v/v solution</i>
5	Bilangan Asam <i>Acid value</i>	--	2.99	Max. 8
6	Bilangan Ester <i>Ester value</i>	--	6.93	Max. 20
7	Putaran Optik <i>Optical Rotation</i>	--	(-) 51°	(-) 48° - (-) 65°
8	Patchouli Alcohol (C <sub>15</sub> H <sub>26</sub> O)	%	30	Min. 30

Catatan : Hasil analisa hanya berdasarkan contoh yang diterima  
*Notice : This report is based on the testing sample only*

Padang, January 12, 2022

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**DARMAN, ST. MM**

Head of the Laboratory



**PEMERINTAH PROPINSI SUMATERA BARAT**  
**DINAS PERINDUSTRIAN DAN PERDAGANGAN**  
**UPTD BALAI PENGUJIAN DAN SERTIFIKASI MUTU BARANG**  
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**PADANG**

**LAPORAN HASIL ANALISA**

*Report of Analysis*

Nomor : 234/BPSMB-LHA/IX/2021


Pemilik /Eksportir : **CV. Surya Agro Nusantara**  
*Owner / Exporter*  
Alamat : Jl. Tuanku Sasak. Kec. Pasaman, Pasaman Barat  
*Address*  
Contoh : Minyak Sereh Merah / 128/MS/21  
*Sample*  
Tanggal Terima : September 16, 2021  
*Date of received*  
Tanggal Pengujian : September 17-21, 2021  
*Date of analysis*  
Metode Pengujian : SNI 06-3953-1995  
*Methods of analysis*

**HASIL  
RESULT**

NO	KARAKTERISTIK <i>Specification</i>	UNIT <i>Unit</i>	HASIL PENGUJIAN <i>Test Result</i>	PERSYARATAN SNI <i>SNI Requirement</i>
1	Warna <i>Colour</i>	--	Kuning Pucat	Kuning Pucat-sampai Kecoklatan
2	Bobot Jenis <i>Specific Gravity</i>	--	0.881	0.880 - 0.922
3	Indeks Bias <i>Refractive Index</i>	--	1.466	1.466 - 1.475
4	Kelarutan Dalam Etanol 80 % <i>Soluble in 80 % Etanol</i>	--	1:2 Jernih	1:2 Jernih, seterusnya jernih
5	Geraniol <i>Geraniol</i>	%	20.93	Min. 85
6	Sitronellal <i>Sitronellal</i>	%	52.33	Min. 35
7	Bau <i>Odor</i>	--	Segar, khas Minyak Sereh	Segar, khas Minyak Sereh
8	Putaran Optik <i>Optical Rotation</i>	--	- 24°	( 0° ) - ( - 6° )

Catatan : Hasil analisa hanya berdasarkan contoh yang diterima  
*Notice : This report is based on the testing sample only*

Padang, September 23, 2021  
Regional Laboratory  
For Quality Control

  
**DARMAN, ST, MM**



**PEMERINTAH PROPINSI SUMATERA BARAT**  
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**PADANG**

**LAPORAN HASIL ANALISA**

*Report of Analysis*

Nomor : 236/BPSMB-LHA/IX/2021

Pemilik /Eksportir : **CV. Surya Agro Nusantara**  
*Owner / Exporter*

Alamat : Jl. Tuanku Sasak. Kec. Pasaman, Pasaman Barat  
*Address*

Contoh : Minyak Nilam / 130/PO/21  
*Sample*

Tanggal Terima : September 16, 2021  
*Date of received*

Tanggal Pengujian : September 17-21, 2021  
*Date of analysis*

Metode Pengujian : SNI 06-2385-2006  
*Methods of analysis*

**HASIL  
RESULT**

<b>NO</b>	<b>KARAKTERISTIK</b> <i>Specification</i>	<b>UNIT</b> <i>Unit</i>	<b>HASIL PENGUJIAN</b> <i>Test Result</i>	<b>PERSYARATAN SNI</b> <i>SNI Requirement</i>
1	Warna <i>Colour</i>	--	Coklat Kemerahan	Light Yellow to Reddish Brown
2	Bobot Jenis <i>Specific Gravity</i>	--	0.9611	0.950 - 0.975
3	Indeks Bias <i>Refractive Index</i>	--	1.509	1.507 - 1.515
4	Kelarutan Dalam Etanol 90 % <i>Soluble in 90 % Etanol</i>	--	1:7	Soluble or soluble with slight opalescence in 1 : 10 v/v solution
5	Bilangan Asam <i>Acid value</i>	--	4.0	Max. 8
6	Bilangan Ester <i>Ester value</i>	--	9.9	Max. 20
7	Putaran Optik <i>Optical Rotation</i>	--	(-) 58°	(-) 48° (-) 65°
8	Patchouli Alcohol (C <sub>15</sub> H <sub>26</sub> O)	%	37.41	Min. 30

Catatan : Hasil analisa hanya berdasarkan contoh yang diterima  
*Notice : This report is based on the testing sample only*

Padang, September 23, 2021  
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