

LAMPIRAN

Lampiran 1 Hasil Determinasi Stevia

BRIN
Badan Riset dan Inovasi Nasional

DIREKTORAT PENGELOLAAN KOLEKSI ILMIAH
Gedung B.J. Habibie JL. M.H Thamrin No. 8, Jakarta Pusat 10340
www.brin.go.id

Nomor : B-2009/II.6.2/DI.05.07/6/2022
Lampiran : -
Perihal : Hasil Identifikasi/Determinasi Tumbuhan

28 Juni 2022

Yth.
Bpk./ibu/Sdr/(). Wahyu Darmawan
NIM : 20180311085
Universitas Esa Unggul

Bersama ini kami sampaikan hasil identifikasi/determinasi tumbuhan yang Saudara kirimkan ke "Herbarium Bogoriense", Direktorat Pengelolaan Koleksi Ilmiah BRIN Cibinong, adalah sebagai berikut :

No.	No. Kol.	Jenis	Suku
1.	Stevia	Stevia rebaudiana (Bertoni) Bertoni	Asteraceae

Demikian, semoga berguna bagi Saudara.

Pt. Direktorat Pengelolaan Koleksi Ilmiah,
Badan Riset dan Inovasi Nasional

TT ELEKTRONIK

Dr. Ir. Hendro Wicaksono, M.Sc., Eng

Dokumen ini dikembangkan
dengan dukungan
pendanaan sebagian dari
anggaran Kementerian
Pertanian, Perikanan dan
Kehutanan Republik
Indonesia melalui
Anggaran Mekanisme Kerja Sama
GCR

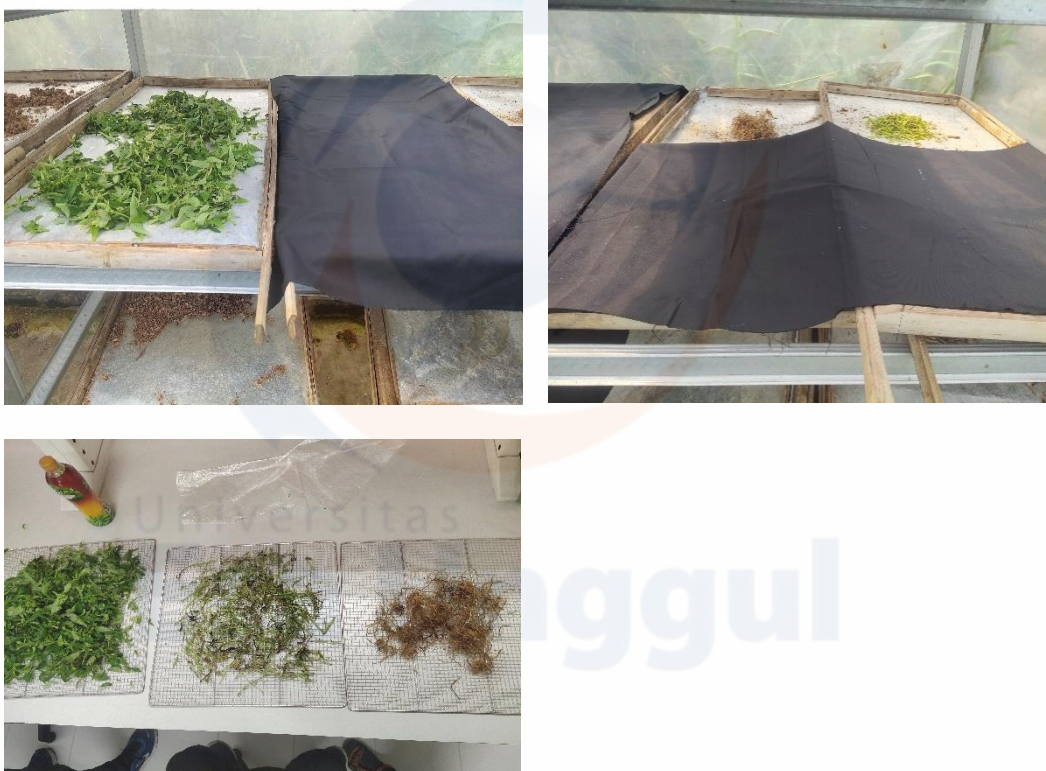
Lampiran 2 Proses Pemanenan Stevia



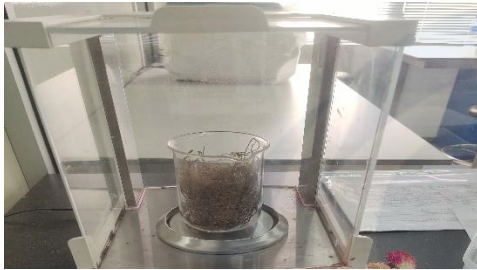
Lampiran 3 Proses Pencucian Tanaman Stevia



Lampiran 4 Proses Pengeringan Matahari Secara langsung, Tertutup Kain Dan Dehidrator



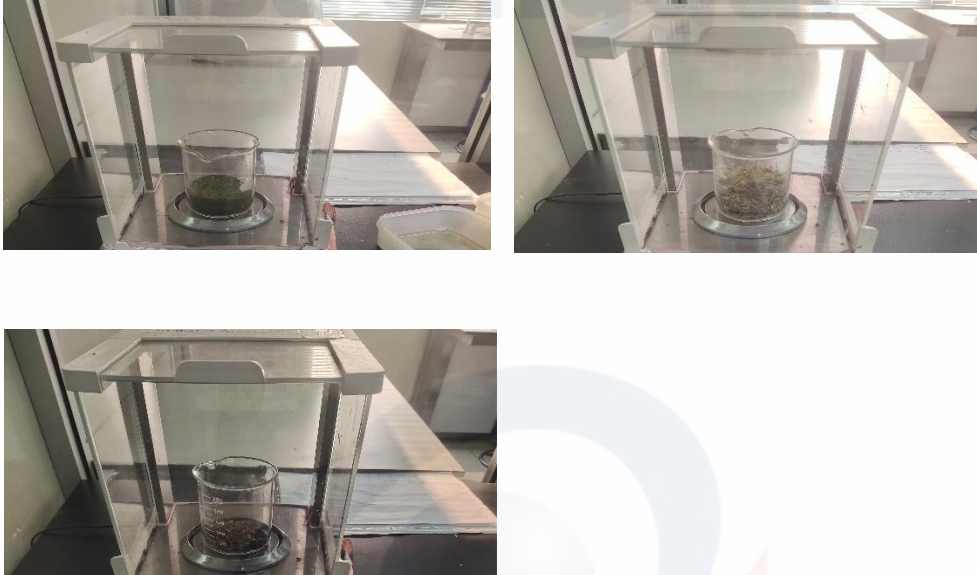
Lampiran 5 Penimbangan Bobot Kering Simplisia Daun, Batang, dan Akar



Lampiran 6 Proses Pembuatan Bubuk Simplisia Daun, Batang dan Akar Stevia



Lampiran 7 Penimbangan Simplisia Bubuk Daun, Batang, dan Akar



Lampiran 8 Data Susut Pengeringan Stevia

SUSUT PENGERINGAN				
Sampel	Pengeringan	Bobot Basah (gr)	Bobot Kering (gr)	Susut Pengeringan (%)
Daun	L	133	23,7051	82,1766
	K	133	24,9677	81,2273
	D	133	27,4737	79,3431
Batang	L	70	19,8654	71,6209
	K	70	17,1849	75,4501
	D	70	18,2395	73,9436
Akar	L	35	4,3161	87,6683
	K	35	4,1813	88,0534
	D	35	4,1768	88,0663

Lampiran 9 Pengujian Kadar Air Daun, Batang dan Akar Stevia



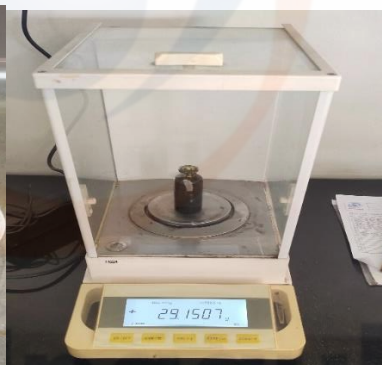
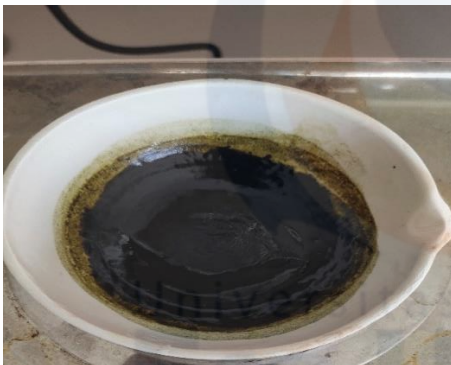
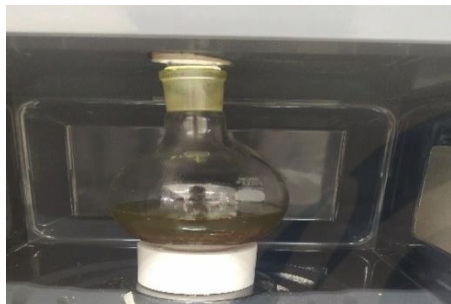
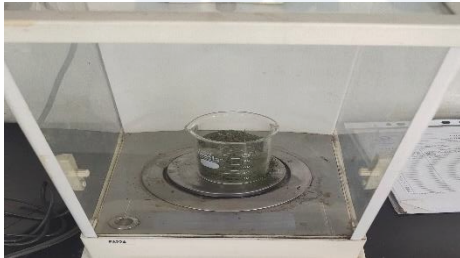
Lampiran 10 Data Kadar Air

No	Bagian Tumbuhan	Pengeringan	Berat Sampel (gr)	Krus Kosong (gr)	Krus + Sampel (gr)	Hasil Setelah di Oven (gr)	Kadar Air (%)	Rata-Rata (%)
1	Daun	L	2,08	23,46	25,54	25,25	13,53	10,09
			2,06	22,48	24,54	24,38	7,90	
			2,07	23,37	25,44	25,26	8,84	
		K	2,03	24,78	26,82	26,53	13,83	10,39
			2,03	23,46	25,49	25,32	8,43	
			2,03	23,47	25,50	25,32	8,91	
		D	2,01	23,46	25,47	25,30	8,51	9,02
			2,01	22,37	24,37	24,19	9,01	
			2,01	23,37	25,37	25,18	9,53	
2	Batang	L	2,00	24,78	26,79	26,60	9,14	10,20
			2,00	23,46	25,46	25,28	9,22	
			2,01	23,46	25,46	25,22	12,25	
		K	2,00	22,48	24,48	24,30	9,20	10,75
			2,00	23,46	25,46	25,18	14,05	
			2,00	22,46	24,47	24,29	9,02	
		D	2,00	22,46	24,46	24,28	9,04	9,37
			2,00	22,84	24,85	24,67	8,88	
			2,00	23,37	25,37	25,16	10,19	
3	Akar	L	2,00	22,48	24,49	24,24	12,50	10,50
			2,00	22,45	24,45	24,27	9,20	
			2,00	22,65	24,66	24,46	9,80	
		K	2,00	22,65	24,66	24,46	9,80	10,73
			2,00	23,47	25,47	25,22	12,49	
			2,00	22,46	24,46	24,26	9,92	
		D	2,00	23,39	25,40	25,21	9,16	9,71
			2,00	23,84	25,84	25,64	10,43	
			2,00	22,46	24,47	24,28	9,53	

Lampiran 11 Data Kadar Abu Simplisia Stevia

KADAR ABU								
No	Sampel	Pengeringan	Berat sampel (gr)	Krus Kosong (gr)	krus + Sampel (gr)	Hasil Setelah Tanur (gr)	Kadar Abu (%)	Rata-Rata (%)
1	Daun	L	2,00	35,45	37,45	35,74	14,29	13,76
			2,00	35,46	37,46	35,72	13,22	
		K	2,00	35,45	37,45	35,76	15,10	15,19
			2,00	35,45	37,45	35,76	15,28	
		D	2,00	35,46	37,46	35,66	10,07	9,78
			2,00	35,47	37,47	35,66	9,49	
2	Batang	L	2,00	35,45	37,45	35,72	13,62	13,34
			2,00	33,46	35,46	33,72	13,05	
		K	2,00	33,47	35,47	33,78	15,76	15,69
			2,00	32,49	34,49	32,80	15,62	
		D	2,00	34,81	36,81	35,00	9,20	9,38
			2,00	32,49	34,49	32,68	9,57	
3	Akar	L	2,00	32,72	34,73	32,98	12,87	12,75
			2,00	34,87	36,87	35,12	12,63	
		K	2,00	33,64	35,64	33,93	14,95	14,87
			2,00	35,46	37,46	35,75	14,78	
		D	2,00	33,47	35,47	33,72	12,84	12,72
			2,00	35,47	37,47	35,72	12,61	

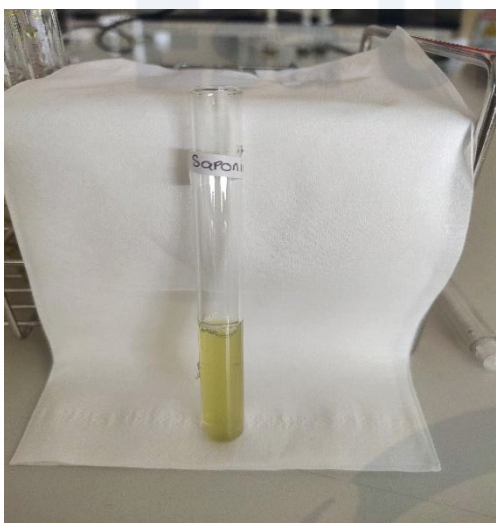
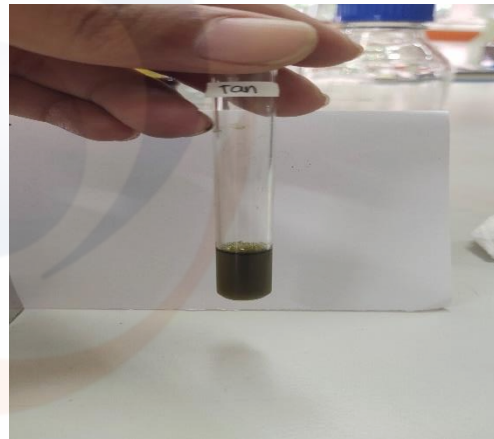
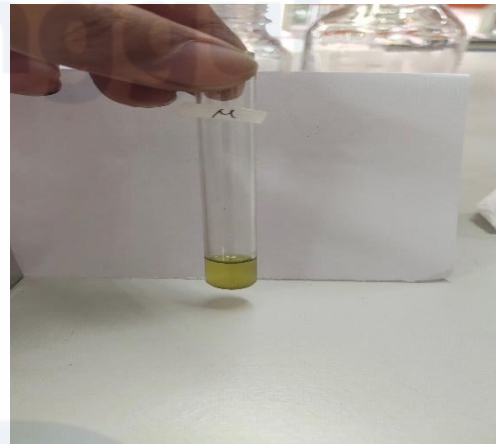
Lampiran 12 Pembuatan Ekstrak Daun, Batang, dan Akar Stevia



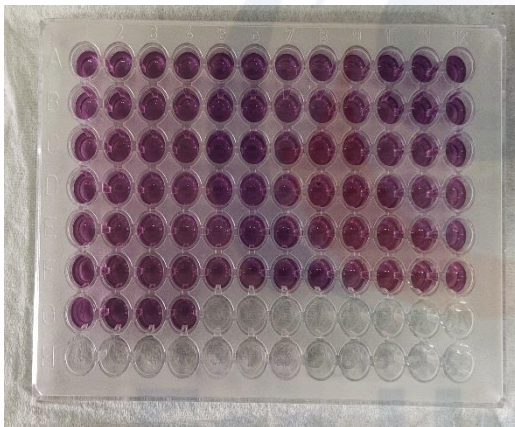
Lampiran 13 Rendemen Ekstrak

HASIL EKSTRAK							
No	Sampel	Pengeringan	Berat Sampel (gr)	Berat Cawan Kosong (gr)	Berat Cawan + Ekstrak (gr)	Berat Ekstrak (gr)	Rendemen Ekstrak (%)
1	Daun	L	23,31	19,28	28,52	9,24	39,63
		K	24,66	19,76	30,01	10,26	41,59
		D	24,11	19,78	29,15	9,38	38,89
2	Batang	L	15,95	19,43	20,90	1,47	9,19
		K	16,42	19,56	20,88	1,32	8,04
		D	16,31	18,02	19,59	1,57	9,64
3	Akar	L	4,67	45,77	46,39	0,62	13,20
		K	4,22	53,41	54,03	0,62	14,74
		D	4,15	54,17	54,79	0,62	15,03

Lampiran 14 Skrining Fitokimia



Lampiran 15 Pengujian Aktivitas Antioksidan Ekstrak Stevia



Lampiran 16 Data Pengujian Aktivitas Antioksidan Ekstrak Stevia

DAUN PENGERINGAN LANGSUNG								
Konsentrasi	Abs 1	Abs 2	Abs 3	% inhibisi 1	% inhibisi 2	% inhibisi 3	Rata2 % inhibisi	IC ₅₀
100	0,693	0,684	0,693	7,324	8,581	7,271	7,725	674,523
200	0,642	0,640	0,641	14,091	14,385	14,238	14,238	
300	0,581	0,570	0,576	22,235	23,720	23,011	22,988	
400	0,536	0,532	0,530	28,387	28,841	29,109	28,779	
500	0,463	0,462	0,466	38,029	38,176	37,735	37,980	
600	0,412	0,416	0,416	44,862	44,421	44,394	44,559	
700	0,364	0,357	0,364	51,282	52,231	51,308	51,607	
blanko	0,748	0,744	0,751					
Rata-rata blanko	0,748							

Daun Pengerinan Dehidrator								
Konsentrasi	Abs 1	Abs 2	Abs 3	% Inhibisi 1	% Inhibisi 2	% Inhibisi 3	Rata-rata inhibisi	IC ₅₀
100	0,974	0,985	0,998	23,414	22,596	21,559	22,523	363,500
200	0,859	0,842	0,834	32,494	33,783	34,420	33,566	
300	0,722	0,713	0,706	43,225	43,917	44,483	43,875	
400	0,608	0,604	0,602	52,179	52,493	52,651	52,441	
500	0,472	0,478	0,476	62,886	62,422	62,564	62,624	
600	0,345	0,342	0,358	72,878	73,137	71,880	72,632	
700	0,137	0,135	0,132	89,261	89,387	89,591	89,413	
Blanko	1,272	1,270	1,274					
Rata-rata Blanko	1,272							

Daun Pengerinan kain								
Konsentrasi	Abs 1	Abs 2	Abs 3	% Inhibisi 1	% Inhibisi 2	% Inhibisi 3	Rata-rata inhibisi	IC ₅₀
100	1,091	1,138	1,087	9,905	5,999	10,227	8,710	943,236
200	1,068	1,059	1,060	11,813	12,523	12,490	12,275	
300	1,018	1,010	1,026	15,917	16,562	15,240	15,906	
400	0,977	0,981	0,972	19,304	19,006	19,692	19,334	
500	0,895	0,901	0,898	26,084	25,572	25,869	25,842	
600	0,807	0,780	0,810	33,352	35,540	33,129	34,007	
700	0,742	0,737	0,746	38,695	39,166	38,423	38,761	
Blanko	1,207	1,216	1,210					
Rata-rata Blanko	1,211							

Batang Dehidrator								
Konsentrasi	Abs 1	Abs 2	Abs 3	% Inhibisi 1	% Inhibisi 2	% Inhibisi 3	Rata - Rata Inhibisi	IC ₅₀
100	0,489	0,486	0,485	14,565	15,124	15,334	15,008	616,075
200	0,468	0,468	0,458	18,269	18,147	19,946	18,787	
300	0,421	0,421	0,415	26,376	26,463	27,424	26,754	
400	0,372	0,376	0,364	35,059	34,343	36,422	35,275	
500	0,331	0,319	0,318	42,100	44,266	44,441	43,603	
600	0,299	0,297	0,275	47,726	48,145	52,006	49,292	
700	0,253	0,257	0,267	55,745	55,151	53,334	54,743	
Blanko	0,572	0,574	0,571					
Rata-rata Blanko	0,572							

Batang Kain								
Konsentrasi	Abs 1	Abs 2	Abs 3	% Inhibisi 1	% Inhibisi 2	% Inhibisi 3	Rata - Rata Inhibisi	IC ₅₀
100	0,494	0,511	0,500	13,727	10,704	12,643	12,358	1189,821
200	0,488	0,490	0,487	14,827	14,408	14,932	14,722	
300	0,468	0,461	0,478	18,287	19,387	16,540	18,071	
400	0,441	0,445	0,434	22,934	22,200	24,244	23,126	
500	0,431	0,423	0,424	24,734	26,184	25,922	25,613	
600	0,403	0,413	0,409	29,503	27,913	28,612	28,676	
700	0,390	0,383	0,373	31,949	33,067	34,780	33,265	
Blanko	0,572	0,574	0,571					
Rata-rata Blanko	0,572							

Batang Langsung								
Konsentrasi	Abs 1	Abs 2	Abs 3	% Inhibisi 1	% Inhibisi 2	% Inhibisi 3	Rata-rata Inhibisi	IC ₅₀
100	0,481	0,483	0,489	15,963	15,648	14,478	15,363	1285,855
200	0,477	0,472	0,472	16,627	17,605	17,448	17,227	
300	0,460	0,463	0,470	19,684	19,178	17,832	18,898	
400	0,449	0,445	0,453	21,484	22,235	20,855	21,525	
500	0,426	0,414	0,436	25,537	27,634	23,843	25,671	
600	0,400	0,409	0,401	30,132	28,595	29,923	29,550	
700	0,390	0,383	0,373	31,949	33,067	34,780	33,265	
Blanko	0,572	0,574	0,571					
Rata-rata Blanko	0,572							

Akar Dehidrator								
Konsentrasi	Abs 1	Abs 2	Abs 3	% Inhibisi 1	% Inhibisi 2	% inhibisi 3	Rata-Rata Inhibisi	IC ₅₀
100	0,605	0,603	0,618	10,187	10,573	8,243	9,668	949,093
200	0,576	0,585	0,561	14,477	13,245	16,718	14,813	
300	0,555	0,553	0,556	17,564	17,920	17,445	17,643	
400	0,538	0,524	0,512	20,191	22,299	24,080	22,190	
500	0,498	0,494	0,475	26,084	26,648	29,497	27,409	
600	0,448	0,450	0,437	33,549	33,282	35,197	34,009	
700	0,413	0,412	0,413	38,699	38,827	38,668	38,732	
Blanko	0,672	0,680	0,669					
Rata-Rata Blanko	0,674							

Akar Kain								
Konsentrasi	Abs 1	Abs 2	Abs 3	% Inhibisi 1	% Inhibisi 2	% inhibisi 3	Rata-Rata Inhibisi	IC ₅₀
100	0,601	0,619	0,603	10,855	8,139	10,469	9,821	2081,189
200	0,593	0,602	0,595	11,968	10,647	11,642	11,419	
300	0,591	0,585	0,581	12,250	13,185	13,779	13,071	
400	0,578	0,574	0,579	14,165	14,833	14,031	14,343	
500	0,564	0,563	0,553	16,273	16,495	17,920	16,896	
600	0,539	0,539	0,536	19,939	19,998	20,399	20,112	
700	0,527	0,523	0,526	21,810	22,344	21,878	22,011	
Blanko	0,672	0,680	0,669					
Rata-Rata Blanko	0,674							

Akar Langsung								
Konsentrasi	Abs 1	Abs 2	Abs 3	% Inhibisi 1	% Inhibisi 2	% inhibisi 3	Rata-Rata Inhibisi	IC ₅₀
100	0,585	0,614	0,599	13,126	8,792	11,078	10,998	1670,879
200	0,589	0,590	0,597	12,621	12,384	11,434	12,146	
300	0,577	0,575	0,571	14,298	14,655	15,174	14,709	
400	0,565	0,566	0,556	16,169	15,931	17,534	16,545	
500	0,553	0,534	0,561	17,846	20,785	16,733	18,454	
600	0,521	0,520	0,512	22,670	22,892	24,006	23,189	
700	0,499	0,493	0,497	25,948	26,793	26,200	26,314	
Blanko	0,672	0,680	0,669					
Rata-Rata Blanko	0,674							

Lampiran 17 Sertifikat Analisis Etanol 96%


CERTIFICATION OF ANALYSIS

Product Name : Solvent / Alkohol 96%
Batch no. : 0020210915
Date of Manufacture : 15 September 2021
Date of Expiration : 15 September 2023

NO	PARAMETER	DIMENTION	RESULT	METHOD
1	Ethanol Contains 15 C	% V/V	96.7%	BP
2	Acidity	Ppm	4.1	SNI
3	Fusel Oil Constituents	Ppm	24.7	AOAC
4	Test Time 15 C	Minutes	4.1	BP
5	Methanol Contains %	Ppm	-	-
6	Residu After Evaporation	Ppm	0.573	SCI TABLE
7	Isopropyl Alcohol	Ppm	-	Flam

17 September 2021

HARCO
CHEMICAL
(Q.C.)



Lampiran 18 Sertifikat Analisis DPPH

Sigma-Aldrich

3050 Spence Street, Saint Louis, MO 63103, USA
 Website: www.sigma-aldrich.com
 Email USA: salserv@sigmaaldrich.com
 Outside USA: ourtechserv@sigmaaldrich.com

Certificate of Analysis

Product Name: 2,2-Diphenyl-1-picrylhydrazyl
 Product Number: 09133-90
 Batch Number: 0900126639
 Source Batch: 0000124887
 CAS Number: 1869-66-4
 Storage Temperature: Cool and Refrigerated
 Molecular Formula: $C_{24}H_{14}N_2O_6$
 Formula Weight: 394.32
 Quality Release Date: 17 May 2021

Test	Specification	Result
Appearance (Color)	Conforms to Requirements	Black
Green to Very Dark Green and Black		
Appearance (Form)	Powder	Powder
Solubility (Color)	Dark Purple	Dark Purple
90MGML CHCL3		
Carbon Content	51.5 - 50.1 %	50.9 %
Nitrogen Content	15.8 - 16.8 %	17.7 %
Infrared Spectrum	Conforms to Structure	Conforms
Recommended Retail Period		
3 YEARS		

Champak G.
 Champaka Gudimaru, Manager
 Analyst
 Bangalore
 IN

Sigma-Aldrich warrants that at the time of the quality release or subsequent retail date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchase must determine the suitability of the product for its particular use. See reverse side of envelope or packing slip for additional terms and conditions of sale.
 Version Number: 01 Doc: 1062587 Page 1 of 1

M