



NHR ORGANIC OILS  
24 CHATHAM PLACE, BRIGHTON, BN1 3TN, UK  
+44 (0)1273 746505 [info@nhrorganicoils.com](mailto:info@nhrorganicoils.com) [www.nhrorganicoils.com](http://www.nhrorganicoils.com)

*Certificate of Analysis & Gas Chromatography*  
**Organic Star Anise Essential Oil**  
*(Illicium verum)*

<b>Product Name:</b>	Organic star anise essential oil
<b>Batch Number:</b>	130325-2

<b>Characteristic:</b>	<b>Test method</b>	<b>Test result</b>
Specific Gravity	ISO 279:1998	0.9749
Refractive Index	ISO 280:1998	1.5493
Optical Rotation	ISO 592:1998	[+] 0.77

Combined analyses chromatography by GC/MS and GC/FID for volatile components:

#	time	RI	hit %	chemical name	integral	%FID
1	9.79	939	95	Pinene <a->	18533866	1.16
2	11.40	992	79	Myrcene	1408945	0.12
3	11.98	1010	77	Phellandrene <a->	7421434	0.42
4	12.18	1016	85	Carene <D-3->	5230368	0.33
5	12.79	1034	90	Limonene	35260152	2.07
6	12.84	1035	71	Phellandrene <b->	1553997	0.36
7	12.92	1038	67	Cineole 1,8	2687235	0.28
8	15.14	1103	51	Linalool	3883460	0.32
9	18.08	1186	82	Terpinen-4-ol	2886699	0.19
10	18.53	1199	67	Terpineol <a->	2621097	0.17
11	18.74	1205	87	Methyl Chavicol (=Estragole)	9599800	0.48
12	20.65	1261	76	Anethole <Z-> (= Anethole <cis->)	2589222	0.14
13	20.81	1265	43	Anisaldehyde <p->	6169650	0.32
14	21.99	1299	80	Anethole <E-> (= Anethole <trans->)	1797201569	92.67
15	24.96	1389	90	Copaene <a->	1714830	0.16
16	26.46	1436	75	Caryophyllene <E-> (=Caryophyllene <b->)	2914004	0.17
17	26.77	1446	86	Bergamotene <a-trans->	4292501	0.22
18	33.96	1688	79	Foeniculin	6662942	0.41
				<b>Total</b>		<b>99.99</b>