



Certificate of Analysis

Product : Glaxolide
Batch Number: 4394809
Best Before Date: April 2022

Flashpoint : > 212°F / > 100°C

	Test data	Spec	Unit
PRIMARY ODOR EVALUATION	According to Standard		
VISUAL COLOR & APPEARANCE	According to Standard		
Color Description	colorless		
REFRACTIVE INDEX, 20C	1.4961	1.4930 -1.4970	#
RELATIVE DENSITY D20/4	0.9468	0.9420 -0.9480	#
RELATIVE DENSITY D25/25	0.9454	0.9407 -0.9467	#

GC PEAKS PERCENTAGE

ISOPROPYL MYRISTATE	31.20	25.00 - 40.00	%
Test Condition - GC # POLAR COLUMN (%AREA)			
GALAXOLIDE	48.97	48.00 - 52.00	%
Test Condition - GC # POLAR COLUMN (%AREA)			
GALAXOLIDE D PEAK	0.00	0.00 - 0.20	%
Test Condition - GC # POLAR COLUMN (%AREA)			
GALAXOLIDE L PEAK	0.00	0.00 - 0.20	%
Test Condition - GC # POLAR COLUMN (%AREA)			

This is an electronic document and therefore not signed.

IFF certifies that the quality of this product
conforms to our product specifications



Genetically Modified Organisms (GMO)

Product Name: GALAXOLIDE 50 PCT IPM!!
Customer Material Code: GALAX50PCTIPM

February 14, 2019
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To whom it may concern,

With reference to your inquiry we would like to inform you about the presence of intentionally added ingredients derived from Genetically Modified Organisms (GMOs) in the IFF product indicated above.

Ingredient Name	CAS Number	Concentration (%)*
No substances to declare		

*!Only substances present equal or above 10ppm are reported

Please note that this fragrance product may contain technical aids (e.g. anti-oxidants or solvents) that may originate from! botanical species such as soy that are potentially genetically modified.

If we may be of further assistance to you, please do not hesitate to contact us.

(This is a computer generated document and therefore not signed.)



GALAX50PCTIPM

GALAXOLIDE 50 PCT IPM

The following specifications apply to sealed, unopened containers stored under the recommended conditions for the duration of the shelf life.

TECHNICAL NAME : REFER TO THE MATERIAL SAFETY DATA SHEET

CAS NUMBER: REFER TO THE MATERIAL SAFETY DATA SHEET

SENSORY DATA

APPEARANCE	CLEAR LIQUID
COLOUR	COLORLESS
ODOUR	CONFORMS TO STANDARD

ANALYTICAL DATA

REFRACTIVE INDEX, 20° C	1.4930 to 1.4970
RELATIVE DENSITY, 20/4° C	0.9420 to 0.9480
SPECIFIC GRAVITY, 25/25° C	0.9407 to 0.9467

GLC - POLAR COLUMN (% AREA)

GALAXOLIDE	48.00% to 52.00%
ISO PROPYL MYRISTATE	25.00% to 40.00%
GALAXOLIDE D PEAK	0.00% to 0.20%
GALAXOLIDE L PEAK	0.00% to 0.20%

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The above specification is subject to change pending the accumulation of additional data. The information above is given for guidance only. Although the greatest care has been taken to ensure its accuracy, changing regulations and individual product characteristics may require specification modifications or make it necessary to disclaim any warranties or liabilities.

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HAVERHILL MOON HALL LANE, HAVERHILL (SUFFOLK), CB9 8LG UNITED KINGDOM T (44) 1440 715000 F (44) 1440 715183

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06 - Apr - 2017



GALAX50PCTIPM

GALAXOLIDE 50 PCT IPM

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ADMINISTRATIVE DATA

TYPICAL ANTIOXIDANTS	NONE
SHELF LIFE	24 MONTHS
FLASHPOINT	> 100 C / > 212 F

SAMPLING PROCEDURE HEAT CONTAINER IN A HOT ROOM THERMOSTATED BETWEEN 40-50°C FOR 24 HOURS. MIX WELL BEFORE USE.

STORAGE CONDITIONS: AMBIENT (41-113 F / 5-45 C)

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FRAGRANCE PRODUCT INFORMATION SHEET

Product: GALAXOLIDE 50 PCT IPM

: Date: January 29, 2019

I. PRODUCT IDENTIFICATION

- A. TSCA Chemical Name: _____
 EU Chemical Name: _____
 US TSCA CAS #: _____ EU CAS #: _____
- B. **Is product an intentional composition?** YES ☒ NO ☐ % Naturals: 0
- C. This product is manufactured as a fragrance ingredient for use in manufacturing fragrance products. Any warranties or representations, express or implied, regarding the suitability of the product for any other purpose is hereby disclaimed.

II. NATURAL AND NATURALLY DERIVED PRODUCTS (non-naturals skip to section III)

A. Natural Products: with respect to the definition of natural for fragrances in international standard ISO 9235, 2014, Is this product or all the odoriferous components of this product:

1. Is product 100% Pure (Single botanical source) (one plant, one origin; not blended or diluted) YES ☐ NO ☐
 Botanical source: _____
2. CAS # (if any): _____
3. Is product 100% Natural (derived only from natural sources) ? YES ☐ NO ☐
4. Is product Blend of Naturals and Synthetic ? YES ☐ NO ☐
5. Is product obtained by physical means or natural processes (expression, steam distillation, extraction by vegetable material, Natural alcohol, CO2..) and has not been chemically modified ? YES ☐ NO ☐
6. Is product obtained by extraction or any process using synthetic /organic solvents or non natural gas? YES ☐ NO ☐
 If yes, please identify and indicate % residue: _____
7. Is product obtained by codistillation using any solvent ? YES ☐ NO ☐
 If yes, please identify and indicate %: _____
8. Does product contain any added antioxidants, diluents, colorants etc. YES ☐ NO ☐
 If yes, please identify and indicate %: _____
 If yes, are these additives obtained from biological starting materials /by using physical means ? YES ☐ NO ☐
9. Has your product been subject to any of the following means of microbiological control?: YES ☐ NO ☐
 Addition of preservatives?
 If yes, please identify and indicate %: _____
 Irradiation? YES ☐ NO ☐
 Use of gas? YES ☐ NO ☐
 If yes, please identify and indicate % residue: _____

B. GMO CERTIFICATION

Our product/fragrance does not contain fragrance ingredients derived from Genetically Modified Organisms (GMO). However some technical aids, such as anti-oxidants or solvents, if used in this product/fragrance may originate from botanical species that are potentially genetically modified such as soy.

FRAGRANCE PRODUCT INFORMATION SHEET

III. REGULATORY STATUS OF INGREDIENTS

A.	1. USA a. Are all ingredient(s) in compliance with section 5, TSCA? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> b. Contains TSCA Low Volume Materials? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> c. Contains any ingredient(s) subject to 12b under TSCA? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, please list ingredient(s): _____							
	2. EUROPE a. Are all ingredient(s) listed on EINECS? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> b. If no, are all non-EINECS ingredient(s) listed on ELINCS? Yes <input type="checkbox"/> No <input type="checkbox"/> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> REACH It is IFF's intention to comply with all relevant REACH requirements to assure that the substances and preparations you purchase from IFF in the EU will be REACH compliant. Please be aware that IFF as a vendor can only support REACH compliance for products purchased from us in the EU. Ingredients in products purchased by you from IFF outside the EU and which you export to the EU will need to be (pre)registered by the importer that is based in the EU. Where applicable and as required by law the REACH registration number, when available to us, will be communicated to you via the Safety Data Sheet. </div>							
	3. CANADA a. Are all ingredient(s) listed on CDSL (Canadian Domestic Substances List)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> b. Are all non-CDSL ingredient(s) listed on NDSL (Non-Domestic Substances List)? Yes <input type="checkbox"/> No <input type="checkbox"/> c. Canada Ministerial Condition: _____							
	4. AUSTRALIA a. Are all ingredient(s) listed on AICS (Australian Inventory of Chemical Substances)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> b. Have all non-listed ingredient(s) been notified as Limited Volume? Yes <input type="checkbox"/> No <input type="checkbox"/> c. or Low Volume? Yes <input type="checkbox"/> No <input type="checkbox"/> d. Restricted Ingredient(s)? _____							
	5. PHILIPPINES a. Are all ingredient(s) listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> b. Have all non-listed ingredient(s) been notified with Low Volume Notification? Yes <input type="checkbox"/> No <input type="checkbox"/>							
	6. KOREA Are all ingredient(s) listed on ECL (Korean Inventory of Existing Chemicals List)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
	7. CHINA a. Are all ingredient(s) listed on IECS (Chinese Inventory of Existing Chemicals Substances List)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> b. Are all non-listed ingredients notified to Chemical Registration Center (CRC) of the Chinese Ministry of Environmental Protection (MEP)? Yes <input type="checkbox"/> No <input type="checkbox"/> c. If Yes, Which type of notification? Simplified <input type="checkbox"/> Regular Notification <input type="checkbox"/> Other: <input type="checkbox"/> (Please specify): _____							
	8. SWITZERLAND Are all ingredient(s) listed on Swiss Giftliste 1 and Inventory of Notified New Substances? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
	9. NEW ZEALAND Are all ingredient(s) listed on NZIoC (New Zealand Inventory of Chemicals)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
	10. JAPAN a. Are all ingredient(s) listed on ENCS (Japanese Existing and New Chemical Substances)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> b. If no, have all non-listed ingredient(s) been notified with Low Volume Notification? Yes <input type="checkbox"/> No <input type="checkbox"/> c. Are all ingredient(s) listed on ISHL (Japanese Industrial Safety and Health Law)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> d. If no, have all non-listed ingredient(s) been notified with Low Volume Notification? Yes <input type="checkbox"/> No <input type="checkbox"/> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 33%; text-align: center;"><i>Japan Type 1 Monitoring</i></td> <td style="width: 33%; text-align: center;"><i>Japan Type 2 Monitoring</i></td> <td style="width: 33%; text-align: center;"><i>Japan Type 3 Monitoring</i></td> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td></td> </tr> </table>	<i>Japan Type 1 Monitoring</i>	<i>Japan Type 2 Monitoring</i>	<i>Japan Type 3 Monitoring</i>				
<i>Japan Type 1 Monitoring</i>	<i>Japan Type 2 Monitoring</i>	<i>Japan Type 3 Monitoring</i>						
	11. TAIWAN a. Are all ingredient(s) listed on Taiwan Chemical inventory? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
	12. OTHER Other than above, is this product or any component of this product restricted in any country? Yes <input type="checkbox"/> No <input type="checkbox"/> Reason: _____							
B.	DEA <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;"><i>LIST I Precursor Chemicals</i></td> <td style="width: 50%; text-align: center;"><i>LIST II Precursor Chemicals</i></td> </tr> <tr> <td style="height: 20px;"></td> <td></td> </tr> </table>	<i>LIST I Precursor Chemicals</i>	<i>LIST II Precursor Chemicals</i>					
<i>LIST I Precursor Chemicals</i>	<i>LIST II Precursor Chemicals</i>							

FRAGRANCE PRODUCT INFORMATION SHEET

C. CALIFORNIA PROPOSITION 65

Chemical Name	CAS#	Direct Add %	Synthetic Impurity %	Natural component from food source %	Natural component from non-food source %

D. NANOMATERIAL

Is this product, or any ingredient in this product a nanomaterial as defined in the EU Commission Recommendation of 18 October 2011 on the Definition of Nanomaterial (The European Commission, 2011/696/EU - below)? Yes ☐ No ☒

Nanomaterial' means a natural, incidental or manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for 50 % or more of the particles in the number size distribution, one or more external dimensions is in the size range 1 nm-100 nm.

E. Safety aspects for handling, storage and transportation:

- MSDS (OSHA: CFR 1910:1200): Attached ☒ In preparation ☐ Non-hazardous (per OSHA) ☐
- European MSDS equivalent: Attached ☒ In preparation ☐ Not available at present ☐
- Customs Tariff Number: 33.0290.10.500
- Vapor Pressure (mmHg @ 25°C): <0.01 mm Hg
- Switzerland Volatile Organic Compounds (VOC) %: 0

IV. SAFETY ASPECTS FOR PERFUMERY USE

A. Product contains any of the materials indicated with percents below:

	Restricted* Materials	Direct Add %	Indirect Add %
1.	Acetanilide 103-84-4 EINECS: 203-150-7	-	-
2.	Acetyl Isoeugenol (Isoeugenyl Acetate) 93-29-8 EINECS: 202-236-1	-	-
3.	Alkyl Phenols and Alkyl Phenol Ethoxylates (Identity):	-	-
4.	Anethole 4180-23-8 EINECS: 224-052-0	-	-
5.	Animal Derived (source indicated).		
	Bovine (Beef) Yes <input type="checkbox"/>		
	Ovine (Sheep) Yes <input type="checkbox"/>		
	Caprine (Goat) Yes <input type="checkbox"/>		
	Other Yes <input type="checkbox"/>	-	-
	Harvested Ingredients (eg: Beeswax) (Identity):	-	-
6.	Anise Seed Oil 8007-70-3, 84775-42-8 EINECS: 283-872-7	-	-
7.	Bay Leaf Oil 8006-78-8, 85085-61-6 EINECS: 285-385-5	-	-
8.	Benzyl acetate 140-11-4 EINECS: 205-399-7	-	-
9.	Calamus 8015-79-0, 84775-39-3 EINECS: 283-869-0	-	-
10.	Camphor 76-22-2 EINECS: 200-945-0	-	-
11.	Camphor Oil 8008-51-3 EINECS: 295-980-1	-	-
12.	Caryophyllene, beta 87-44-5	-	-
13.	Cassia Leaf/Buds/Oil/Abs 8007-80-5, 84961-46-6 EINECS: 284-635-0	-	-
14.	Cedarwood Atlas (Cedrus atlantica) 8023-85-6, 92201-55-3	-	-
15.	Cedarwood virginiana 8000-27-9, 85085-41-2	-	-
16.	Cinnamic Acid 140-10-3, 621-82-9 EINECS: 205-398-1, 210-708-3	-	-
17.	Cinnamon bark/leaf/abs/oil 8015-91-6, 84649-98-9, 72869-80-8 EINECS: 283-479-0	-	-
18.	Cinnamyl Anthranilate 87-29-6 EINECS: 201-738-8	-	-
19.	Citronella Oil 8000-29-1, 89998-15-2 EINECS: 289-753-6	-	-
20.	Clove Oil 8000-34-8, 84961-50-2 EINECS: 284-638-7	-	-
21.	Diacetyl 431-03-8 EINECS: 207-069-8	-	-
22.	Dimethyl Benzyl Carbonyl Acetate 151-05-3	-	-
23.	Ebanol 68480-05-7	-	-
24.	Ethoxy Ethanol, 2-, 110-80-5, 111-15-9 EINECS: 203-804-1, 203-839-2	-	-
25.	Ethyl Phenyl Glycidate 121-39-1 EINECS: 204-467-3	-	-
26.	Ethyl Vanillin 121-32-4 EINECS: 204-464-7	-	-
27.	Eucalyptol 470-82-6 EINECS: 207-431-5	-	-

FRAGRANCE PRODUCT INFORMATION SHEET

28.	Eucalyptus oil 8000-48-4, 91771-68-5, 84625-32-1, 85203-56-1, 90028-48-1, 68917-30-6	-	-
29.	Eugenyl acetate 93-28-7	-	-
30.	Galbanum 8023-91-4, 9000-24-2 EINECS: 232-532-6	-	-
31.	Geranium (Abs., oil) 8000-46-2, 90082-51-2 EINECS: 290-140-0	-	-
32.	Geranyl Acetate 105-87-3 EINECS: 203-341-5	-	-
33.	Glycol Ethers & Glycol Ether Esters (Identity):		
		-	-
34.	Guaiacol 90-05-1 EINECS: 201-964-7	-	-
35.	Halogenated (Identity):		
		-	-
36.	Hay Oil 8031-00-3, 100209-32-3 EINECS: 309-340-7	-	-
37.	Heliotropin 120-57-0 EINECS: 204-409-7	-	-
38.	Hercolyn 8050-15-5 EINECS: 232-476-2	-	-
39.	Hydroxycitronellal Dimethyl Acetal 141-92-4 EINECS: 205-510-9	-	-
40.	Lavender (Abs., Oil) 8000-28-0, 84776-65-8 EINECS: 283-994-0	-	-
41.	Lavandin Oil 8022-15-9, 93455-96-0 EINECS: 297-384-7	-	-
42.	Laurel Leaf Oil 8002-41-3, 84603-73-6, 8007-48-5	-	-
43.	Lemongrass Oil 8007-02-1, 89998-14-1 EINECS: 289-752-0	-	-
44.	Linalyl acetate 115-95-7	-	-
45.	Litsea Cubeba 68855-99-2, 90063-59-5 EINECS: 290-018-7	-	-
46.	Macrocyclic Musks (Identity):		
		-	-
47.	Menthol 89-78-21, 2216-51-5 EINECS 201-939-0, 2216-51-5	-	-
48.	Methyl Cedryl Ketone 32388-55-9	-	-
49.	Methyl Heptyl Ketone 821-55-6 EINECS: 212-480-0	-	-
50.	Methyl Isoeugenol 93-16-3 EINECS: 202-224-6	-	-
51.	Narcissus 8023-75-4, 90064-26-9, 68917-12-4 EINECS: 290-086-8, 290-087-3	-	-
52.	Nitriles (Identity):		
		-	-
53.	Nitromusks (Identity):		
		-	-
54.	Nonanal Dimethyl Acetal 18824-63-0 EINECS: 242-603-3	-	-
55.	Nut Oils & Nut Derivatives	-	-
56.	Orange 8008-57-9, 97766-30-8, 8028-48-6, 68514-75-0, 68606-94-0, 68647-72-3, 68917-57-7	-	-
57.	Orris Products	-	-
58.	Palm Oil 8002-75-3 EINECS: 232-316-1	-	-
59.	Palm Kernel Oil 8023-79-8 EINECS: 232-425-4	-	-
60.	Palm Oil/ Palm Kernel Oil Derivatives (Identity):		
	ISO PROPYL MYRISTATE 27.7%		
61.	Patchouli Oil 8014-09-3, 84238-39-1, 73049-67-9, 73049-85-1 EINECS: 282-493-4	-	-
62.	Peppermint 8006-90-4, 84082-70-2, 68608-37-7, 68606-97-3	-	-
63.	Perilla Oil 68132-21-8, 90082-61-4 EINECS: 290-151-0	-	-
64.	Phenyl Acetaldehyde Acetals 101-48-4, 29895-73-6 EINECS: 202-945-6, 249-934-2	-	-
65.	Phenyl Ethyl Acetate 101-97-3 EINECS: 202-993-8	-	-
66.	Phoenicea Oil 68916-94-9, 90046-03-0 EINECS: 289-970-6	-	-
67.	Phthalates (Identity):		
		-	-
68.	Pimento Oil 8006-77-7, 84929-57-7 EINECS: 284-540-4	-	-
69.	Pinene/alpha 80-56-8 EINECS: 201-291-9	-	-
70.	Pinene/beta 127-91-3 EINECS: 204-872-5	-	-
71.	Pinus Pumilionius 97676-05-6	-	-
72.	Polycyclic Musks (Identity):		
	Hexamethylindanopyran, 1222-05-5, 65.3700%	-	-
73.	Resorcinol 108-46-3 EINECS: 203-585-2	-	-
74.	Rose (specify) 8007-01-0, 84604-12-6, 90106-38-0 EINECS: 283-289-8, 290-260-3	-	-
75.	Rose Oxide 16409-43-1 EINECS: 240-457-5	-	-
76.	Salicylates (Identity):		

FRAGRANCE PRODUCT INFORMATION SHEET

		-	-
77.	Sandalwood 8006-87-9, 84787-70-2, 84650-41-9 EINECS: 284-111-1, 283-511-3	-	
78.	Sandela (BC) 70955-71-4 EINECS: 275-062-7	-	
79.	Sandiff (CC) 68877-29-2 EINECS: 272-556-4	-	
80.	Santalol 11031-45-1, 115-71-9, 77-42-9 EINECS: 234-262-4	-	-
81.	Spearmint Oil 8008-79-5, 84696-51-5 EINECS: 283-656-2	-	
82.	Styrallyl Alcohol 98-85-1 EINECS: 202-707-1	-	
83.	Styrene 100-42-5 EINECS 202-851-5	-	-
84.	Terpinene 99-86-5	-	-
85.	Terpineol 586-81-2, 7299-41-4, 7299-40-3, 7299-42-5; 8000-41-7, 10482-56-1, 98-55-5, 138-87-4, 562-74-3	-	-
86.	Terpinolene 586-62-9	-	-
87.	Thyme 8007-46-3, 84776-98-7, 85085-75-2, 84929-51-1 EINECS: 284-023-3, 285-397-0, 284-535-7	-	
88.	Tonka Bean 8046-22-8, 8024-04-2 EINECS: 232-460-5	-	
89.	Trimeth Cyclohexene – Carboxaldehydes (Identity):		
		-	
90.	Turpentine 8006-64-2		
91.	Undecanone, 2-, 112-12-9 EINECS: 203-937-5	-	-
92.	Undecylenic Acid & it's Esters 112-38-9, 692-86-4, 109-42-2, 12262-03-2, 111-81-9	-	
93.	Vanillin 121-33-5 EINECS: 204-465-2	-	-
94.	Vetiver Oil 8016-96-4, 84238-29-9, 68917-65-7 EINECS: 282-490-8	-	-
95.	Violet Leaf 8024-08-6, 90147-36-7 EINECS: 290-427-0	-	
	COMMON SOLVENTS OR DILUENTS		
96.	Carbitol 111-90-0 EINECS: 203-919-7	-	-
97.	Diethyl Phthalate 84-66-2 EINECS: 201-550-6	-	-
98.	Dipropylene Glycol 110-98-5 EINECS: 203-821-4	-	-
99.	Ethanol 64-17-5 EINECS: 200-578-6	-	-
100.	Hexylene Glycol 107-41-5 EINECS:203-489-0	-	
101.	Isopropyl Myristate 110-27-0 EINECS:203-751-4	34.6300	-
102.	Phenyl Ethyl Alcohol 60-12-8 EINECS: 200-456-2	-	-
103.	Propylene Glycol 57-55-6 EINECS: 200-338-0	-	-
104.	Triethyl Citrate 77-93-0 EINECS: 201-070-7	-	-
105.	Solvents/Diluents (other than identified above) (Identity):		
	ANTIOXIDANTS & OTHER ADDITIVES		
106.	BHA 121-00-6, 25013-16-5 EINECS: 204-442-7, 246-563-8	-	
107.	BHT 128-37-0 EINECS: 204-881-4	-	
108.	Alpha-Tocopherol	-	
109.	Natural Tocopherols	-	
110.	Methyl Di-t-butyl-4-hydroxyhydrocinnamate (Methylox) 6386-38-5 EINECS: 228-985-4	-	
111.	Tertiary Butylhydroquinone 1948-33-0 EINECS: 217-752-2	-	
112.	Other Antioxidants (Identity):	-	
113.	Colorants (Identity):	-	
114.	Emulsifiers (Identity):	-	
115.	Preservatives (Identity):		
116.	Furocoumarin Content:		
	5-Methoxy Psoralen 484-20-8 EINECS: 207-604-5	-	-
	Bergamottin 7380-40-7	-	-
	Byacangelicol 61046-59-1	-	-
	Epoxybergamottin 206978-14-5	-	-
	Isopimpinellin 482-27-9	-	-
	Oxypeucedanin 737-52-0	-	-
	8-Methoxy Psoralen 298-81-7 EINECS: 206-066-9	-	-
	Imperatorin 482-44-0 EINECS: 207-581-1	-	-
	ANNEX LISTED MATERIALS OF THE COSMETIC REGULATION (EC) N° 1223/2009	%	
117.	Annex Listed Materials (Identity):	-	-
118.	CMR's Official and self-classified Direct Add (Identity):		

FRAGRANCE PRODUCT INFORMATION SHEET

119.	CITES (Identity):		
	Appendix II:		
	Appendix III:		
120.	JAPAN COSMETICS		
	Appendix I:		
	Appendix II:		
	Appendix III:		
	Appendix IV:		
121.	CANADA HOT LIST (Identity):		
122.	EU REACH SVHC CANDIDATES (Identity):		
	*Restricted - Some customers and/or regulatory agencies either limit or restrict the use of the materials listed		

B. This material complies with the most current IFRA Guidelines? (IFRA 48)

Yes ☒ No ☐

According to the IFRA 48th amendment implementation, please find the completed tables below:

Restricted Fragrance Allergens

<u>Ingredient Name</u>	<u>% Direct (added as such)</u>	<u>% from Naturals</u>	<u>% Impurities (from synthetics)</u>	<u>% Total</u>
alpha-Amyl Cinnamic Aldehyde (122-40-7)	-	-	-	0
alpha-Amyl Cinnamic Alcohol (101-85-9)	-	-	-	0
Anisyl Alcohol (105-13-5)	-	-	-	0
Benzyl Alcohol 100-51-6)	-	-	-	0
Benzyl Benzoate (120-51-4)	-	-	-	0
Benzyl Cinnamate (103-41-3)	-	-	-	0
Benzyl Salicylate (118-58-1)	-	-	-	0
Cinnamic Alcohol (104-54-1)	-	-	-	0
Cinnamic Aldehyde (104-55-2)	-	-	-	0
Citral (mixture of neral + geranial) (5392-40-5)	-	-	-	0
Citronellol (106-22-9)	-	-	-	0
Coumarin (91-64-5)	-	-	-	0
Eugenol (97-53-0)	-	-	-	0
Farnesol (4602-84-0)	-	-	-	0
gamma-Methyl Ionone (127-51-5)	-	-	-	0
Geraniol (106-24-1)	-	-	-	0
Hexyl Cinnamic Aldehyde (101-86-0)	-	-	-	0
Hydroxyisohexyl 3-Cyclohexene Carboxaldehyde (31906-04-4; 51414-25-6)	-	-	-	0
Hydroxycitronellal (107-75-5)	-	-	-	0
Iso Eugenol (97-54-1)	-	-	-	0
Butylphenyl Methylpropional (80-54-6)	-	-	-	0
Limonene (5989-27-5; 138-86-3; 5989-54-8)	-	-	-	0
Linalool (78-70-6)	-	-	-	0
Methyl Heptine Carbonate (111-12-6)	-	-	-	0
Oakmoss (68917-10-2; 90028-68-5)	-	-	-	0
Treemoss (68648-41-9; 90028-67-4)	-	-	-	0
Resinic Acid Level:		-		
Atranol Level:		-		
Chloratranol Level:		-		

IFRA 48th Amendment restricted substances (other than allergens)

FRAGRANCE PRODUCT INFORMATION SHEET

Name	CAS	% Direct (added as such)	% from Naturals	% Impurities (from synthetics)	% Total
Acetic acid, anhydride, reaction products with 1,5,10-trimethyl-1,5,9-cyclododecatriene	144020-22-4	-	-	-	0
Abietic acid	514-10-3	-	-	-	0
Allyl esters	Various	-	-	-	0
AHMI (Phantolide)	15323-35-0	-	-	-	0
Allyl Phenoxyacetate	7493-74-5	-	-	-	0
Benzaldehyde	100-52-7	-	-	-	0
Benzenepropional, 4-methoxy-alpha-methyl	5462-06-6	-	-	-	0
Benzyl cyanide	140-29-4	-	-	-	0
Bourgeonal	18127-01-0	-	-	-	0
Alpha Butyl cinnamaldehyde	7492-44-6	-	-	-	0
3-(m-tert-Butylphenyl)-2-methylpropionaldehyde (m-BMHCA)	62518-65-4	-	-	-	0
Carvone	99-49-0	-	-	-	0
Cinnamic aldehyde dimethyl acetal	4364-06-1	-	-	-	0
Cinnamyl nitrile	4360-47-8	-	-	-	0
Cis/trans asarone	5273-86-9 / 2883-98-9	-	-	-	0
Creosol	93-51-6	-	-	-	0
Cuminaldehyde	122-03-2	-	-	-	0
Cyclamen alcohol	4756-19-8	-	-	-	0
Cyclamen aldehyde	103-95-7	-	-	-	0
Cyclopentadecanolide	106-02-5	-	-	-	0
Damascenone	23696-85-7	-	-	-	0
Damascone alpha	43052-87-5	-	-	-	0
Damascone beta	23726-92-3, 23726-91-2	-	-	-	0
Damascone delta	57378-68-4	-	-	-	0
Damascone gamma	35087-49-1	-	-	-	0
Damascone Iso	39872-57-6, 33673-71-1, 70266-48-7	-	-	-	0
Dibenzyl ether	103-50-4	-	-	-	0
Dihydrocoumarin	119-84-6	-	-	-	0
6,7-Dihydro-1,1,2,3,3-pentamethyl-4(5H)-indanone (DPMI)	33704-61-9	-	-	-	0
Dimethylcyclohex-3-ene-1-carboxaldehyde (mixed isomers)	68737-61-1, 68039-49-6, 68039-48-5, 27939-60-2, 67801-65-4, 36635-53-5, 68084-52-6, 35145-02-9	-	-	-	0
Dimethylcyclohexenepentenone (Dynascone/Galbascone)	56973-85-4	-	-	-	0
Dihydrosafrol	94-58-6	-	-	-	0
Dimethyl anthranilate	85-91-6	-	-	-	0
Estragole	140-67-0	-	-	-	0
2-Ethoxy-4-methylphenol	2563-07-7	-	-	-	0
p-Ethylbenzaldehyde	4748-78-1	-	-	-	0
Furfural	98-01-1	-	-	-	0
Helional (alpha-Methyl-1,3-benzodioxole-5-propionaldehyde)(MMDHCA)	1205-17-0	-	-	-	0
2-Heptylidene cyclopentan-1-one	39189-74-7	-	-	-	0
trans-2-Hexenal	6728-26-3	-	-	-	0
Hexyl salicylate	6259-76-3	-	-	-	0
Hexylidene cyclopentanone	17373-89-6	-	-	-	0
Iso E super	54464-57-2	-	-	-	0
Isobergamate	68683-20-5	-	-	-	0
Isobutyl N-methylantranilate	65505-24-0	-	-	-	0
p-Isobutyl-alpha-methyl Hydrocinnamal	6658-48-6	-	-	-	0
Isocyclocitral	1335-66-6	-	-	-	0

FRAGRANCE PRODUCT INFORMATION SHEET

Isocyclogeraniol	68527-77-5	-			0
Isosafrol	120-58-1	-	-	-	0
Majantol	103694-68-4	-			0
p-Methoxybenzaldehyde	123-11-5	-	-	-	0
ortho-Methoxycinnamaldehyde	1504-74-1	-	-	-	0
7-Methoxycoumarin	531-59-9	-	-	-	0
Scentenal	86803-90-9	-			0
Methyl beta naphthyl ketone	93-08-3	-			0
Methyl cinnamic aldehyde	101-39-3	-			0
Methyl eugenol	93-15-2	-	-	-	0
Methyl heptadienone	1604-28-0	-			0
Methyl ionones, mixed isomers	1335-46-2, 127-42-4, 127-43-5, 127-51-5, 7779-30-8, 79-89-0	-	-	-	0
Methyl octane carbonate	111-80-8	-	-	-	0
3-Methyl-2-(pentyloxy)cyclopent-2-en-1-one	68922-13-4	-	-	-	0
p-Methyltetrahydroquinoline	91-61-2	-			0
2-Nonyl-1-al dimethyl acetal	13257-44-8	-	-	-	0
Nootkatone	4674-50-4	-	-	-	0
1-Octen-3-yl acetate	2442-10-6	-	-	-	0
1-(2,4,4,5,5-Pentamethyl-1-cyclopenten-1-yl) ethan-1-one	13144-88-2	-	-	-	0
Perilla aldehyde	2111-75-3	-	-	-	0
Phenyl acetaldehyde	122-78-1	-	-	-	0
3-Phenylbutanal	16251-77-7	-			0
2-Phenylpropionaldehyde	93-53-8	-			0
Polynuclear Aromatic Hydrocarbons (PAHs)				-	0
Propylidene phthalide	17369-59-4	-	-	-	0
Pseudomethylionone	26651-96-7, 72968-25-3, 1117-41-5	-	-	-	0
Pseudoionone	141-10-6	-	-	-	0
Safranal	116-26-7	-	-	-	0
Safrol	94-59-7	-	-	-	0
Sclareol	515-03-7	-	-	-	0
1,2,3,4-Tetrahydro-4-methylquinoline	19343-78-3	-	-	-	0
o, m, p-Tolualdehydes and their mixtures	529-20-4, 620-23-5, 104-87-0, 1334-78-7	-	-	-	0

*The stoichiometric presence of the aldehydes of any Schiff bases in our products are taken into account assuming 100% dissociation.

Levels of substances present at 1 ppm or greater are reported; substances at levels less than 1 ppm in this product are shown as "<0.0001". Substances not present in the product are reported as "-" or "0".

FRAGRANCE PRODUCT INFORMATION SHEET

IFRA 48th Amendment restricted naturals

Name	CAS	%	Name	CAS	%
Angelica root oil	8015-64-3	-	Opoponax	8021-36-1	-
Bergamot oil expressed	8007-75-8	-		9000-78-6	-
	8001-88-5	-		93384-32-8	-
Birch wood oil, distillates	84012-15-7	-	Peru balsam ext. and distillates	8007-00-9	-
	85940-29-0	-	Petitgrain Mandarin oil	8014-17-3	-
	68917-50-0	-		8014-29-7	-
Bitter orange peel oil expressed	68916-04-1	-	Rue oil	84929-47-5	-
	72968-50-4	-	Savin oil, <i>Juniperus phoenicea</i> L.	8024-00-8	-
Cade oil, distillates	8013-10-3	-		8046-19-3	-
	90046-02-9	-		8024-01-9	-
Cumin oil	8014-13-9	-		94891-27-7	-
	8016-20-4	-		94891-28-8	-
Grapefruit oil expressed	90045-43-5	-	Styrax		-
	8022-96-6	-		8046-19-3	-
Jasmine Grandiflorum	8024-43-9	-		8024-01-9	-
	90045-94-6	-	Tagetes oil and absolutes	91722-29-1	-
	84776-64-7	-		8016-84-0	-
Jasmin Sambac	91770-14-8	-	Tea leaf absolute	84650-60-2	-
Lemon oil cold pressed	8008-56-8	-	Verbena absolute	8024-12-2	-
	84929-31-7	-		117-98-6	-
Lime oil expressed	8008-26-2	-	Vetiver oil acetylated	84082-84-8	-
	90063-52-8	-	(Vetiveryl Acetate)	72230-87-6	-
Melissa oil (geniune Melissa officinalis L.)	8014-71-9	-		62563-80-8	-
	84082-61-1	-	Ylang ylang	8006-81-3	-
				68606-83-7	-
				83863-30-3	-

IFRA 48th Amendment prohibited materials

Does this product contain any material prohibited or not recommended by IFRA 48th amendment? Yes ☐ No ☒

If yes, please specify and indicate percent: _____

List of materials either prohibited or not "recommended for use" by IFRA 48th amendment

Acetyl ethyl tetramethyl tetralin (AETT, Versalide)	88-29-9	2,4-Hexadien-1-ol	111-28-4
Acetyl isovaleryl (5-Methyl-2,3-hexanedione)	13706-86-0	Hexahydrocoumarin	700-82-3
Allantroot oil (Elecampane oil)	97676-35-2	trans-2-Hexenal diethyl acetal	67746-30-9
Allyl heptin carbonate	73157-43-4	trans-2-Hexenal dimethyl acetal	18318-83-7
Allyl isothiocyanate	57-06-7	Hydroabietyl alcohol (Abitol)	13393-93-6
Amyl cyclopentenone	25564-22-1	Hydroabietyl alcohol (Abitol)	1333-89-7
Anisylidene acetone (4-(4-methoxyphenyl)-3-buten-2-one)	943-88-4	Hydroquinone monoethylether (4-Ethoxy phenol)	622-62-8
cis-beta Asarone ((Z)-2,4,5-Trimethoxypropen-1-yl benzene)	5273-86-9	Hydroquinone monomethylether (4-Methoxy phenol)	150-76-5
trans Asarone ((E)-1,2,4-trimethoxy-5-prop-1-enylbenzene)	2883-98-9	Isophorone	78-59-1
Benzene (directly added, not indirectly added from naturals or as synthetic impurity)	71-43-2	6-Isopropyl-2-decalol	34131-99-2
Benzyl cyanide (directly added, not indirectly added from naturals)	140-29-4	Massoia bark oil	85085-26-3
Benzylidene acetone (4-Phenyl-3-buten-2-one)	122-57-6	Massoia lactone	54814-64-1
Birch wood (bark) pyrolysates (oils), crudes (not rectified or distilled)	8001-88-5	Massoia lactone	51154-96-2
Birch wood (bark) pyrolysates (oils), crudes (not rectified or distilled)	85940-29-0	7-Methoxycoumarin (directly added, not indirectly added from naturals)	531-59-9
Birch wood (bark) pyrolysates (oils), crudes(not rectified or distilled)	84012-15-7	alpha-Methyl anisylidene acetone (1-(4-Methoxyphenyl)-1-penten-3-one)	104-27-8
Boldo leaf oil	8022-81-9	6-Methyl coumarin (Toncarine)	92-48-8
Boldo leaf oil	84649-96-7	7-Methyl coumarin	2445-83-2
3-Bromo-1,7,7-trimethylbicyclo[2.2.1]heptane-2-one	76-29-9	Methyl crotonate	623-43-8
Bromostyrene	103-64-0	4-Methyl-7-ethoxycoumarin (Maraniol)	87-05-8
p-tert-Butylphenol	98-54-4	Methyl methacrylate	80-62-6
Cade oils, crude (not rectified or distilled)	8013-10-3	3-Methyl-2 (3)-nonenenitrile	53153-66-5
Cade oils, crude(not rectified or distilled)	90046-02-9	Moskene	116-66-5
Carvone oxide	33204-74-9	Musk ambrette	83-66-9
Chenopodium oil	8006-99-3	Musk tibetine	145-39-1
Chenopodium oil	89997-47-7	Musk xylol	81-15-2
Cinnamylidene acetone	4173-44-8	Nitrobenzene	98-95-3
Colophony	8050-09-7	2,4-Nonadienal	6750-03-4
Costus root oil, absolute and concrete	8023-88-9	trans, trans, 2,4-Nonadienal	5910-87-2
Costus root oil, absolute and concrete	90106-55-1	2,4-Octadienal, trans, trans-	30361-28-5
Cyclamen alcohol (3-(4-Isopropylphenyl)-2-methylpropanol)	4756-19-8	Pentylidene cyclohexanone	25677-40-1
2,4-Decadienal	2363-88-4	Peru balsam (exudation from Myroxylon pereirae (Royle) Klotzsch) (not extract or rectified or distilled)	8007-00-9
trans, trans, 2,4-Decadienal	25152-84-5	Phenyl acetone (Methyl benzyl ketone)	103-79-7
1,3-Dibromo-2-methoxy-4-methyl-5-nitrobenzene (Musk KS)	62265-99-0	Phenyl benzoate	93-99-2
1,3-Dibromo-4-methoxy-2-methyl-5-nitrobenzene (Musk alpha)	No CAS		
2,2-Dichloro-1-methylcyclopropylbenzene	3591-42-2		

FRAGRANCE PRODUCT INFORMATION SHEET

Diethyl maleate	141-05-9	Pseudoionone (2,6-Dimethylundeca-2,6,8-trien-1-one)	141-10-6
Dihydroabietyl alcohol	26266-77-3	Pseudomethylionones	26651-96-7
2,4-Dihydroxy-3-methyl-benzaldehyde	6248-20-0	Pseudomethylionones	72968-25-3
4,6-Dimethyl-8-t-butyl coumarin (Butolia)	17874-34-9	Pseudomethylionones	1117-41-5
Dimethyl citraconate (cis-Methylbutenedioic acid, dimethyl ester)	617-54-9	Quinoline	91-22-5
3,7-Dimethyl-2-octen-1-ol (6,7-Dihydrogeraniol)	40607-48-5	Safrole (directly added, not indirectly added from naturals)	94-59-7
Diphenyl amine	122-39-4	Isosafrole (directly added, not indirectly added from naturals)	120-58-1
2,4-Dodecadialenal, trans, trans	21662-16-8	Dihydrosafrole (directly added, not indirectly added from naturals)	94-58-6
2,4-Dodecadien-1-ol, (2E,4E)-	18485-38-6	Santolina oil	84961-58-0
Esters of 2-nonynoic acid, except methyl octine carbonate	Various	Savin Oil (Juniperus savina L.)	8024-00-8
Esters of 2-octynoic acid, except meth and allyl heptene carbonate	Various	Styrax gums, crude (not extract or rectified or distilled)	8024-01-9
Ethyl acrylate	140-88-5	Styrax gums, crude (not extract or rectified or distilled)	8046-19-3
Ethylene glycol monoethyl ether	110-80-5	Styrax gums, crude (not extract or rectified or distilled)	94891-27-7
Ethylene glycol monoethyl ether acetate	111-15-9	Styrax gums, crude (not extract or rectified or distilled)	94891-28-8
Ethylene glycol monomethyl ether	109-86-4	Toluene (directly added, not indirectly added from naturals or as synthetic impurity)	108-88-3
Ethylene glycol monomethyl ether acetate	110-49-6	2,4-Undecadienal	13162-46-4
Fig leaf absolute	68916-52-9	trans, trans, 2,4-Undecadienal	30361-29-6
Fig leaf absolute	90028-74-3	Verbena oil	8024-12-2
Furfuryl alcohol	98-00-0	Verbena oil	85116-63-8
Furfurylideneacetone	623-15-4		
Geranyl nitrile	5146-66-7		
Geranyl nitrile	5585-39-7		
Geranyl nitrile	31983-27-4		
2,4-Heptadienal	5910-85-0		
trans, trans, 2,4-Heptadienal	4313-03-5		
trans-2-Heptenal	18829-55-5		
2,4 Hexadienal	80466-34-8		
trans, trans, 2,4 Hexadienal	142-83-6		
trans, cis, 2,4 Hexadienal	53398-76-8		

QRA Statement

Indicated below are the maximum percentages of this material which can be used in each category, based on the IFRA* standards through the 48th Amendment and/or based on safety standards derived by IFF in accordance with the IFRA Code of Practice requirement to ensure safe use of ingredients not subject to an IFRA standard.

IFRA Product Category	Product Types	% Maximum in Finished Products
1	Lip Products	0%
2	Deodorant and Antiperspirant, Fragranced Bracelets	5.0%
3A	Hydroalcoholic Products applied to recently shaved skin - EdT	20.0%
3B	Hydroalcoholic Products applied to recently shaved skin - fine fragrance	20.0%
3C	Men's facial creams and balms, Baby creams, lotions and oils	5.0%
4A	Hydroalcoholic Products applied to unshaved skin - EdT, Perfume kits, Scent strips	20.0%
4B	Fine fragrance for unshaved skin	20.0%
4C	Hair styling aids spray, Body creams, lotions, Foot care products, Hair deodorant	5.0%
4D	Fragrancing cream for unshaved skin	5.0%
5	Women's facial cream/facial makeup, Hand products, Facial masks, Wipes or Refreshing tissues for face, neck, hands or body, Baby powder and talc	5.0%
6	Mouthwash, breath sprays and toothpaste	0%
7	Intimate wipes, Baby wipes, Insect repellent	5.0%
8A	Make-up remover, Non-spray hair styling products, Nail products, Body powder (excluding baby)	2.0%
8B	Hair dyes	2.0%
9A	Rinse off products for hands, hair or body, face wash, rinse off depilatory products, shaving cream	5.0%
9B	Feminine Hygiene- pads, liners, Toilet paper	5.0%
9C	Air Freshener Spray, Aerosol cleaning products, Napkins, Facial Tissues	5.0%
10A	Household cleaning nonspray, Laundry products	2.5%
10B	Diapers, Toilet seat wipes	2.5%
11	All non-skin contact products, e.g. candles, incenses, enclosed air fresheners Incidental skin contact products, e.g. potpourri, sachets, oil refills	100.0%

*The IFRA (International Fragrance Association at ifraorg.org) standards are guidelines for the safe use of fragrance ingredients and are based on an evaluation by independent experts of the toxicological information of the ingredients as it relates to ingredient concentrations and exposure levels to final products. For ingredients that have an IFRA standard, or ingredients that contain constituents that have an IFRA standard, the percent maximum in a finished product are indicated as per the standard. For ingredients that do not have an IFRA standard, the percent maximum in a finished product is based on an evaluation of toxicological information for the ingredient following the guidelines as established by the Research Institute for Fragrance Materials (RIFM) and the International Fragrance Association (IFRA). In the situation where the ingredient has been evaluated and determined not to be a dermal sensitizer, pragmatic maximum levels are provided as general guidance. However, the safe use level of this ingredient in your product can only be determined by your evaluation of the toxicological information and dermal No Effect Sensitization Induction Level or other relevant No Effect Level, and your understanding of the exposure to the ingredient from the use of your or your downstream user's final product, which may depend on the levels of the ingredients and the presentation, labeling, packaging and use instructions if any.

FRAGRANCE PRODUCT INFORMATION SHEET

V. TSE/BSE CERTIFICATION:

WE CERTIFY that the applicable ingredient is obtained from:

- 1 - Synthetic source: YES ☒ NO ☐
- 2 - Botanical source: YES ☐ NO ☒
- a. If YES, are animal ingredients used in the process? and/or YES ☐ NO ☐
- b. Are animal derived** ingredients used? YES ☐ NO ☒
- 3 - Animal source: YES ☐ NO ☒
- 1 - Type of animal: Bovine ☐ Ovine ☐ Caprine ☐ Other ☐
- 2 - Body part(s) used:
- 3 - Country of origin:
- 4 - This product is not a category 1 material, per Article 4 of the EU Directive 1774/2002:
YES ☐ No ☐
- OR**
- 5 - This product is not a category 1 material, per Article 5 of the EU Directive 1774/2002:
YES ☐ No ☐

**animal derivatives include any of the following materials that may be derived from animal tissue: [tallow and tallow derivatives such as fatty acids, fatty acid esters, fatty alcohols fatty amines, fatty amides, soaps, and glycerol.](#)

VI. Halal suitability

WE CONFIRM the following conditions:

- 1 - This product does not contain animal derived ingredients as part of its formulation,
- | Substances(s)* | Cas Number |
|----------------|------------|
| | |
- 2 - This product is obtained from:
- Synthetic source YES ☒ NO ☐
 - Plant source YES ☐ NO ☒
- 3 - This product does not contain intentionally added ethanol,
- 4 - This product does not contain ethanol sourced from alcoholic beverages (eg beers, wines and spirits),
- 5 - The following IFF fragrance production facility is free from pork and/or porcine derived ingredients:
- Chennai, India
 - Garin, Argentina
 - Hazlet, NJ, USA
 - Huangpu, China
 - Singapore
 - Tilburg, Netherlands
 - Tlalnepantla, Mexico

VII. Kosher suitability

This product does not contain any derivatives of animal origin or materials derived from milk, cheese, wheat, grain, etc or alcohol from these sources.

SAFETY DATA SHEET

INTERNATIONAL FLAVORS & FRAGRANCES

Product GALAXOLIDE 50 PCT IPM

Print Date 14.02.2019

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : GALAXOLIDE 50 PCT IPM
 IFF Code : 00070302
 SDS Number : R00000222267

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Ingredient used in Flavour and/or Fragrance preparations

1.3 Details of the supplier of the safety data sheet

Company : Madar Corporation Limited
 19 - 20 Sandleheath Industrial Estate
 Fordingbridge
 SP6 1PA United Kingdom
 Telephone : +441440715000
 Telefax : +441440762199
 E-mail address : sds@iff.com
 Responsible/issuing person

1.4 Emergency telephone number

Refer to section 16 for country specific emergency contact number.

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute aquatic toxicity, Category 1	H400: Very toxic to aquatic life.
Chronic aquatic toxicity, Category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Version : 3.51
 Revision Date : 10.01.2019

SAFETY DATA SHEET

INTERNATIONAL FLAVORS & FRAGRANCES

Product GALAXOLIDE 50 PCT IPM

Print Date 14.02.2019

Hazard statements	:	H410	Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	Prevention: P273 Response: P391 Disposal: P501	Avoid release to the environment. Collect spillage. Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

None reasonably foreseeable.

3. Composition/information on ingredients

3.1 Substances

Not applicable, product is a mixture.

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	1222-05-5 214-946-9 01-2119488227-29	Aquatic Chronic1; H410 Aquatic Acute1; H400	50 - 70

For the full text of the R-phrases mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

General advice	:	Take Hazard and Precautionary phrases (section 2) into account.
If inhaled	:	Remove from exposure site to fresh air and keep at rest. If victim is

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- unconscious, remove foreign bodies from the mouth. If victim has stopped breathing, give artificial respiration. Obtain medical advice.
- In case of skin contact : Remove contaminated clothes. Wash thoroughly with water (and soap). Contact physician if symptoms persist.
- In case of eye contact : Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist.
- If swallowed : Rinse mouth with water and obtain medical advice.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.
- Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : No information available.

5. Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Carbondioxide, dry chemical, foam.
- Unsuitable extinguishing media : Do not use a direct waterjet on burning material.

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Water may be ineffective.

5.3 Advice for firefighters

- Further information : Standard procedure for chemical fires.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal precautions : Avoid inhalation and contact with skin and eyes. A self-contained breathing apparatus is recommended in case of a major spill.

6.2 Environmental precautions

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Environmental precautions : Keep away from drains, surface- and groundwater and soil.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Clean up spillage promptly. Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Gross spillages should be contained by use of sand or inert powder and disposed of according to the local regulations.

6.4 Reference to other sections

Prevent spreading over a wide area (e.g. by containment or oil barriers).

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid excessive inhalation of concentrated vapors. Follow good manufacturing practices for housekeeping and personal hygiene. Wash any exposed skin immediately after any chemical contact, before breaks and meals, and at the end of each work period. Contaminated clothing and shoes should be thoroughly cleaned before re-use.

If appropriate, procedures used during the handling of this material should also be used when cleaning equipment or removing residual chemicals from tanks or other containers, especially when steam or hot water is used, as this may increase vapor concentrations in the workplace air. Where chemicals are openly handled, access should be restricted to properly trained employees.
Keep all heated processes at the lowest necessary temperature in order to minimize emissions of volatile chemicals into the air.

Advice on protection against fire and explosion : Keep away from ignition sources and naked flame.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in a cool, dry, ventilated area away from heat sources. Keep containers upright and tightly closed when not in use.

7.3 Specific end use(s)

Specific use(s) : No information available.

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8. Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL

1,3,4,6,7,8-hexahydro- : End Use: Workers
4,6,6,7,8,8- Exposure routes: Skin contact
hexamethylindeno[5,6-c]pyran Potential health effects: Long-term systemic effects
Exposure time: 8 h
Value: 60 mg/kg bw/day

End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Exposure time: 8 h
Value: 22 mg/m³

End Use: General population
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Exposure time: 8 h
Value: 6,5 mg/m³

End Use: General population
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Exposure time: 8 h
Value: 36 mg/kg bw/day

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End Use: General population
 Exposure routes: Ingestion
 Potential health effects: Long-term systemic effects
 Exposure time: 8 h
 Value: 3,8 mg/kg bw/day

PNEC

1,3,4,6,7,8-hexahydro- : Fresh water
 4,6,6,7,8,8- Value: 0,0044 mg/l
 hexamethylindeno[5,6-c]pyran
 Marine water
 Value: 0,00044 mg/l
 Fresh water sediment
 Value: 2 mg/kg dry weight (d.w.)
 Marine sediment
 Value: 0,394 mg/kg dry weight (d.w.)
 Soil
 Value: 0,31 mg/kg dry weight (d.w.)

8.2 Exposure controls

Engineering measures

Where appropriate, use closed systems to transfer and process this material.
 If appropriate, isolate mixing rooms and other areas where this material is used or openly handled. Maintain these areas under negative air pressure relative to the rest of the plant.

Personal protective equipment

Respiratory protection : Use local exhaust ventilation around open tanks and other open sources of potential exposures in order to avoid excessive inhalation, including places where this material is openly weighed or measured. In addition, use general dilution ventilation of the work area to eliminate or reduce possible worker exposures. No respiratory protection is required during normal operations in a workplace where engineering controls such as adequate ventilation, etc. are sufficient.

If engineering controls and safe work practices are not sufficient, an approved, properly fitted respirator with organic vapor cartridges or

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canisters and particulate filters should be used:

- a) while engineering controls and appropriate safe work practices and/or procedures are being implemented; or
- b) during short term maintenance procedures when engineering controls are not in normal operation or are not sufficient; or
- c) if normal operational workplace vapor concentration in the air is increased due to heat ;
- d) during emergencies; or
- e) if engineering controls and operational practices are not sufficient to reduce airborne concentrations below an established occupational exposure limit.

- Hand protection : Avoid skin contact. Use chemically resistant gloves.
- Eye protection : Use tight-fitting goggles, face shield or safety glasses with side shields if eye contact might occur.
- Hygiene measures : To the extent deemed appropriate, implement pre-placement and regularly scheduled ascertainment of symptoms and spirometry testing of lung function for workers who are regularly exposed to this material.
To the extent deemed appropriate, use an experienced air sampling expert to identify and measure volatile chemicals that could be present in the workplace air to determine potential exposures and to ensure the continuing effectiveness of engineering controls and operational practices to minimize exposure.

Environmental exposure controls

- General advice : Keep away from drains, surface- and groundwater and soil.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : liquid
- Colour : colorless
- Odour : conforms to standard
- Odour Threshold : not determined
- Flash point : > 100,0 °C
- Lower explosion limit : not determined
- Upper explosion limit : not determined

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Flammability (solid, gas)	: not determined
Oxidizing properties	: not determined
Auto-ignition temperature	: not determined
pH	: not determined
Melting point	: not determined
Boiling point	: not determined
Vapour pressure	: < 0,01 hPa
Density	: not determined
Water solubility	: not determined
Partition coefficient: n-octanol/water	: log Pow: 5,920
Solubility in other solvents	: not determined
Viscosity, dynamic	: not determined
Viscosity, kinematic	: not determined
Relative vapour density	: not determined
Evaporation rate	: not determined

9.2 Other information

Refractive index	: not determined
Relative density	: 0,9420 - 0,9480

10. Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions	: Note: Presents no significant reactivity hazard, by itself or in contact with water. Avoid contact with strong acids, alkali or oxidizing agents.
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10.4 Conditions to avoid

Conditions to avoid	: Direct sources of heat.
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10.5 Incompatible materials

Materials to avoid	: Avoid contact with strong acids, alkali or oxidizing agents.
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10.6 Hazardous decomposition products

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Hazardous decomposition products : Carbon monoxide and unidentified organic compounds may be formed during combustion.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

No lead substance

Serious eye damage/eye irritation

No lead substance

Respiratory or skin sensitisation

No lead substance

Germ cell mutagenicity

Information on ingredients with chronic toxicity hazard(s) is available upon request.

Carcinogenicity

Information on ingredients with chronic toxicity hazard(s) is available upon request.

Reproductive toxicity

Information on ingredients with chronic toxicity hazard(s) is available upon request.

Target Organ Systemic Toxicant - Single exposure

Information on ingredients with chronic toxicity hazard(s) is available upon request.

Target Organ Systemic Toxicant - Repeated exposure

Information on ingredients with chronic toxicity hazard(s) is available upon request.

Aspiration hazard

No test data available. Ingredients with an aspiration hazard are identified in section 3.

12. Ecological information

12.1 Toxicity

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Toxicity to fish

1,3,4,6,7,8-hexahydro- : LC50: 0,452 mg/l
4,6,6,7,8,8-
hexamethylindeno[5,6-c]pyran Exposure time: 21 d

Species: *Lepomis macrochirus* (Bluegill sunfish)
Method: OECD Test Guideline 204

Toxicity to daphnia and other aquatic invertebrates

1,3,4,6,7,8-hexahydro- : EC50: 0,9 mg/l
4,6,6,7,8,8-
hexamethylindeno[5,6-c]pyran Exposure time: 48 h
Species: *Daphnia magna* (Water flea)
Method: OECD Test Guideline 202

Toxicity to algae

1,3,4,6,7,8-hexahydro- : ErC50: > 0,854 mg/l
4,6,6,7,8,8-
hexamethylindeno[5,6-c]pyran Exposure time: 72 h
Species: *Pseudokirchneriella subcapitata* (green algae)
Method: OECD Test Guideline 201

EbC50: 0,723 mg/l
Exposure time: 72 h
Species: *Pseudokirchneriella subcapitata* (green algae)
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity)

1,3,4,6,7,8-hexahydro- : NOEC: 0,068 mg/l
4,6,6,7,8,8-
hexamethylindeno[5,6-c]pyran Exposure time: 36 d
Species: *Pimephales promelas* (fathead minnow)
Method: OECD 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

1,3,4,6,7,8-hexahydro- : NOEC: 0,111 mg/l
4,6,6,7,8,8-
hexamethylindeno[5,6-c]pyran Exposure time: 21 d
Species: *Daphnia magna* (Water flea)
Method: OECD 211

12.2 Persistence and degradability

Biodegradability

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1,3,4,6,7,8-hexahydro- : Result: Not readily biodegradable.
 4,6,6,7,8,8- 2 %
 hexamethylindeno[5,6-c]pyran Method: Modified Sturm Test

12.3 Bioaccumulative potential

Bioaccumulation
 1,3,4,6,7,8-hexahydro- : Species: Lepomis macrochirus (Bluegill sunfish)
 4,6,6,7,8,8- Exposure time: 28 d
 hexamethylindeno[5,6-c]pyran Bioconcentration factor (BCF): 1.584
 Method: OECD 305

12.4 Mobility in soil

Mobility : No data available

Distribution among environmental compartments
 1,3,4,6,7,8-hexahydro- : Log Koc: 4,39
 4,6,6,7,8,8-
 hexamethylindeno[5,6-c]pyran

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Additional ecological : There is no data available for this product.
 information

13. Disposal considerations

13.1 Waste treatment methods

Product : Dispose of according to local regulations. Avoid disposing into drainage systems and into the environment.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

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14. Transport information

ADR

UN number : 3082
 Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (HEXAMETHYLINDANOPYRAN)
 Labels : 9
 Packing group : III
 Environmentally hazardous : yes

IATA

UN number : 3082
 Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (HEXAMETHYLINDANOPYRAN)
 Labels : 9
 Packing group : III
 Environmentally hazardous : yes

IMDG

UN number : 3082
 Description of the goods : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (HEXAMETHYLINDANOPYRAN)
 Labels : 9
 Packing group : III
 Marine pollutant : yes (HEXAMETHYLINDANOPYRAN)

Special precautions for user : No special precautions required.

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Water contaminating class (Germany) :	WGK 2significantly water endangering
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15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

16. Other information

Full text of H-Statements referred to under sections 2 and 3.

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H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Further information

In December 2003, the National Institute for Occupational Safety and Health ("NIOSH") published an Alert on preventing lung disease in workers who use or make flavorings [NIOSH Publication Number 2004-110]. In August 2004, the United States Flavor and Extract Manufacturers Association (FEMA) issued a report entitled "Respiratory Safety in the Flavor Manufacturing Workplace".

Both of these reports provide recommendations for reducing employee exposure and for medical surveillance in the workplace. The recommendations in these reports are generally applicable to the use of any chemical in the workplace and you are strongly urged to review both of these reports.

The report published by FEMA also contains a list of "high priority" chemicals. If any of these chemicals are present in this product at a concentration $\geq 1.0\%$ due to an intentional addition by IFF, the chemical(s) will be identified in this safety data sheet.

According to Regulation (EC) No. 1907/2006 the information in this safety data sheet is based on the properties of the material known to IFF at the time the data sheet was issued. The safety data sheet is intended to provide information for a health and safety assessment of the material and the circumstances, under which it is packaged, stored or applied in the workplace. For such a safety assessment International Flavors & Fragrances holds no responsibility. This document is not intended for quality assurance purposes.

Emergency telephone number

Austria	+43 1 406 43 43
Belgium	+32 70 245 245
Bulgaria	+359 2 9154 409 (N. I. Pirogov). poison_centre@mail.orbitel.bg
Croatia	(+385 1) 2348342
Czech Republic	+420 224 919 293 / +420 224 915 402
Denmark	+45 82 12 12 12
Estonia	16662 (National), International (+372) 626 93 90
Finland	+358 9 471977
France	+ 33 (0)1 45 42 59 59
Germany	+31 13 4642 211
Greece	+31 13 4642 211
Hungary	(+36-80) 201-199
Iceland	+354 543 2222
Ireland	+353 1 8092566 / +353 1 8379964
Italy	+39 06 68593726
Latvia	+371 67042473

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Lithuania	+370 5 236 20 52 or +370 687 53378
Luxembourg	+352 8002 5500
Malta	+356 21224071
Netherlands	+31 30 2748888 (Only for the purpose of informing medical personnel in cases of acute intoxications).
Norway	+47 22 59 13 00
Poland	+31 13 4642 211
Portugal	808 250 143
Poland	+31 13 4642 211
Portugal	808 250 143
Romania	+31 13 4642 211
Slovakia	+31 13 4642 211
Slovenia	+31 13 4642 211
Spain	+34 91 562 04 20 (only for the purpose of informing medical personnel in cases of acute intoxications).
Sweden	+46 112
United Kingdom	+44 111 (England, Wales & Scotland)

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Vegan eligibility statement

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Customer Material Code: GALAX50PCTIPM

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To whom it may concern,

With reference to your inquiry to make your determinations about VEGAN requirements, we would like to inform you that, the fragrance ingredient indicated above:

- 1 - is not extracted from living or slaughtered animals from the entire animal kingdom (vertebrates and multicellular invertebrate organisms) as part of its formulation
- 2 - is not harvested from animals (i.e. produced by the animal but not part of the animal itself) such as beeswax, honey, eggs, milk, etc. as part of its formulation
- 3 - is not produced from harvested animal products such as shellac as part of its formulation
- 4 - is not derived from Genetically Modified Organisms (GMO) as part of its formulation
- 5 - for animal testing please refer to the annex for details, further information regarding animal testing carried out on this fragrance ingredient can be provided upon special request

(This is a computer generated document and therefore not signed.)



International Flavors & Fragrances

Vegan eligibility statement

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IFF Code: 00070302
Customer Material Code: GALAX50PCTIPM

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ANNEX: Animal testing

Studies on fragrance ingredients may have been performed on animals to satisfy governmental or self-regulatory requirements relating to the safety assessment and subsequent inclusion on national inventories such as, but not exclusively, the Inventory of Existing Chemical Substances Produced or Imported in China (IECSC), the Japanese ENCS - Existing and New Chemical Substances list, the Canadian Domestic Substance List and others, or may have been conducted to satisfy EU REACH requirements.

Animal studies performed on IFF fragrance ingredients are compliant with requirements for animal testing as laid down in the EU Cosmetics Regulation (EC) No 1223/2009 and in conformance with the interpretations included in the EC Communication document "COM(2013) 135 final" that was issued on 11 March 2013.

Fragrance ingredients are used in all kinds of fragranced consumer (cosmetic and non-cosmetic) products and the regulatory testing of our materials is not exclusive for any particular end-use. Animal testing is only used as a last resort and wherever possible non-testing methods such as in-vitro studies, read-across and exposure based waiving are applied.