

Product	SPA LEO

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

1.1 Product identifier

Trade name

: SPA LEO

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

Use of the Substance/Mixture : Fragrance for consumer product

1.3 Details of the supplier of the safety data sheet

Company	: IFF (NEDERLAND) BV ZEVENHEUVELENWEG 60
	5048 AN TILBURG
Telephone	: +31134642211
Telefax	: +31134636032
E-mail address	: sds@iff.com
Responsible/issuing person	

1.4 Emergency telephone number

+31 13 4642 211

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2 Eye irritation, Category 2 Skin sensitization, Category 1 Chronic aquatic toxicity, Category 2

Classification (67/548/EEC, 1999/45/EC)

Sensitising Irritant Dangerous for the environment H315: Causes skin irritation.

H319: Causes serious eye irritation.

H317: May cause an allergic skin reaction.

H411: Toxic to aquatic life with long lasting effects.

R43: May cause sensitization by skin contact.R38: Irritating to skin.R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms





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Signal word	: Warning	
Hazard statements	: H315 H317 H319 H411	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.
Precautionary statements	: Prevention: P273 P280 Response: P302 + P352 P305 + P351 + P3	 Avoid release to the environment. Wear protective gloves/ eye protection/ face protection. IF ON SKIN: Wash with plenty of soap and water. 38 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Hazardous components which must be listed on the label:

- 6259-76-3 hexyl salicylate
- 68155-66-8 1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one
- 103-95-7 3-p-cumenyl-2-methylpropionaldehyde
- 18127-01-0 3-(4-tert-butylphenyl)propionaldehyde

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 (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
hexyl salicylate	6259-76-3 228-408-6 01-2119638275-36	Xi; R38 Xi; R43 N; R50/53	Skin Irrit.2; H315 Eye Irrit.2; H319 Skin Sens.1; H317 Aquatic Chronic1; H410	10 - 20



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1,4-dioxacyclohexadecane- 5,16-dione	54982-83-1 259-423-6	N; R50/53	Aquatic Chronic1; H410	2,5 - 10
	05-2114094509-37			
1-(1,2,3,4,5,6,7,8-Octahydro-	68155-66-8, 54464-57-	Xi; R38	Skin Irrit.2; H315	2,5 - 10
2,3,8,8-tetramethyl-2-	2, 68155-67-9	Xi; R43	Skin Sens.1; H317	
naphthyl)ethan-1-one	915-730-3	N; R51/53	Aquatic Chronic2; H411	
3,7-dimethyloctan-3-ol	78-69-3	Xi; R38	Skin Irrit.2; H315	2,5 - 10
	201-133-9	N; R51/53	Eye Irrit.2; H319	
3-p-cumenyl-2-	103-95-7	Xi; R38	Skin Irrit.2; H315	2,5 - 10
methylpropionaldehyde	203-161-7	Xi; R43	Skin Sens.1; H317	
		N; R51/53	Aquatic Chronic2; H411	
linalyl acetate	115-95-7	Xi; R38	Skin Irrit.2; H315	0 - 10
-	204-116-4		Eye Irrit.2; H319	
3,7,11-trimethyldodeca-	7212-44-4	N; R50/53	Aquatic Chronic1; H410	2,5 - 10
1,6,10-trien-3-ol,mixed	230-597-5		Aquatic Acute1; H400	
isomers			Eye Irrit.2; H319	
1,4-dioxacycloheptadecane-	105-95-3	N; R51/53	Aquatic Chronic2; H411	2,5 - 10
5,17-dione	203-347-8		* ·	
3-(4-tert-	18127-01-0	Xn; R22	Acute Tox.3; H301	1 - 2,5
butylphenyl)propionaldehyde	242-016-2	Xi; R43	Skin Sens.1; H317	
		N; R51/53	Repr.2; H361f	
		Repr.Cat.3; R62	Aquatic Chronic2; H411	
3-methyl-5-phenylpentanol	55066-48-3	Xi; R41	Eye Dam.1; H318	0 - 5
	259-461-3			
4-(2,6,6-trimethylcyclohex-1- ene-1-yl)-but-3-ene-2-one	14901-07-6 238-969-9	N; R51/53	Aquatic Chronic2; H411	0 - 2,5
3,7-dimethyloctan-1-ol	106-21-8	N; R51/53	Skin Irrit.2; H315	0 - 2,5
5,7-dimethyloctali-1-of	203-374-5	Xi; R38	Eye Irrit.2; H319	0-2,5
	203-374-3	лі, кзо	Aquatic Chronic2; H411	
Vetiveria zizanioides, ext.,	84082-84-8	Xi; R43	Skin Sens.1; H317	0,1 - 1
acetylated	282-031-1	N; R51/53	Aquatic Chronic2; H411	0,1 - 1
,		,	1,,,	
2-ethyl-4-(2,2,3-trimethyl-3-	28219-61-6	N; R50/53	Aquatic Chronic1; H410	0 - 0,25
		Xi; R38	Skin Irrit.2; H315	
cyclopenten-1-yl)-2-buten-1-	248-908-8	<i>M</i> , N 50	-	
cyclopenten-1-yl)-2-buten-1-	248-908-8	M, K50	Eye Irrit.2; H319	
	106-24-1	Xi; R43	Skin Irrit.2; H315	0,1 - 1
cyclopenten-1-yl)-2-buten-1- ol			5	0,1 - 1



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isopentyl salicylate	2050-08-0, 87-20-7 218-080-2, 201-730-4	N; R50/53	Aquatic Chronic1; H410	0 - 0,25
undecan-4-olide	104-67-6 203-225-4	N; R51/53	Aquatic Chronic2; H411	0 - 2,5

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

Components with workplace control parameters

Components	EC-No.	Concentration [%]
benzyl acetate	205-399-7	0 - 10

General advice	sures
General auvice	: Take Risk and Safety phrases (section 15) into account.
If inhaled	: Remove from exposure site to fresh air and keep at rest. 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.
Most important symptoms	and effects, both acute and delayed
Symptoms	: No information available.
Risks	: No information available.
Indication of any immediate	e medical attention and special treatment needed
Treatment	: No information available.

Suitable extinguishing media	: Carbondioxide, dry chemical, foam.	
Unsuitable extinguishing media	: Do not use a direct waterjet on burning materia	1.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire : Water may be ineffective.



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fighting 5.3 Advice for firefighters Further information	: Standard procedure for chemical fires.	
	-	
6. Accidental release		
6.1 Personal precautions, prot	ective equipment and emergency procedures	
Personal precautions	: Avoid inhalation and contact with skin and eyes. A breathing apparatus is recommended in case of a ma	
6.2 Environmental precaution	s	
Environmental precaution	: Keep away from drains, surface- and groundwater a	nd soil.
6.3 Methods and materials for	containment and cleaning up	
Methods for cleaning up	: Clean up spillage promptly. Remove ignition source adequate ventilation. Avoid excessive inhalation of spillages should be contained by use of sand or iner- disposed of according to the local regulations.	vapours. Gross
6.4 Reference to other section	ŝ	
Prevent spreading over a v	vide area (e.g. by containment or oil barriers).	
7. Handling and store	ige	
7.1 Precautions for safe handl	ing	
Advice on safe handling	: Avoid excessive inhalation of concentrated vapors. I manufacturing practices for housekeeping and perso Wash any exposed skin immediately after any chem before breaks and meals, and at the end of each wor Contaminated clothing and shoes should be thoroug before re-use.	onal hygiene. nical contact, k period.
	If appropriate, procedures used during the handling should also be used when cleaning equipment or rer chemicals from tanks or other containers, especially hot water is used, as this may increase upper concern	moving residual 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 : Keep away from ignition sources and naked flame.

fire and explosion

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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 uses

Specific use(s)

: No information available.

8. Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Components	EC-No.	Exposure limit(s)
benzyl acetate	205-399-7	TWA 10 ppm

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 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



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	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	: pale yellow
Odour	: conforms to standard
Odour Threshold	: not determined
Flash point	: 102 °C
Lower explosion limit	: not determined
Upper explosion limit	: not determined
Flammability (solid, gas)	: not determined
Oxidizing properties	: not determined
Autoignition temperature	: not determined
pН	: not determined
Melting point	: not determined
Boiling point	: not determined
Vapour pressure	: 0,03 hPa Calculated
Donaity	: not determined
Density Watar a lability	
Water solubility	: not determined
Partition coefficient: n-	: not determined
octanol/water	
Solubility in other solvents	: not determined



SAFETY DATA SHEET **SAFETY DATA SHEET** INTERNATIONAL FLAVORS & FRAGRANCES

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Viscosity, dynamic Viscosity, kinematic Relative vapour density Evaporation rate	 not determined not determined not determined not determined
9.2 Other information	
Refractive index	: not determined
10. Stability and read	tivity
10.1 Reactivity	
No hazards to be specially	y mentioned.
10.2 Chemical stability	
Stable under normal cond	itions.
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.
10.4 Conditions to avoid	
Conditions to avoid	: Direct sources of heat.
10.5 Incompatible materials	
Materials to avoid	: Avoid contact with strong acids, alkali or oxidizing agents.
10.6 Hazardous decompositio	on products
Hazardous decomposition products	Carbon monoxide and unidentified organic compounds may be formed during combustion.
11. Toxicological inf	ormation
11.1 Information on toxicolog	
Acute toxicity	
Acute oral toxicity	: Acute toxicity estimate: 12.728,48 mg/kg Method: Calculation method
Acute dermal toxicity	: Acute toxicity estimate: 25.310,91 mg/kg Method: Calculation method
Skin corrosion/irritatior	1
hexyl salicylate	: Species: human
Version Regulation Date	: 3.0
Revision Date	: 21.07.2012



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	Result: No skin irrita Method: closed patch Exposure time: 48 h			
	Species: rabbit Result: Skin irritatio Exposure time: 24 h	n		
Serious eye damage/eye i	itation			
3-methyl-5-phenylpentanc	: Species: rabbit Result: Moderate eye Test substance: 5.0%			
	Species: rabbit Result: No eye irrita Test substance: 5% i			
Respiratory or skin sensi	zation			
hexyl salicylate	: maximisation study Species: human Result: Did not cause Test substance: 3.0%	e sensitization on laboratory animals. 6 in petrolatum		
Germ cell mutagenicity				
Information on ingredients	with chronic toxicity hazard(s)	is available upon request.		
Carcinogenicity Information on ingredients	vith 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.



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12. Ecological info	ormation		
12.1 Toxicity			
Toxicity to daphnia an hexyl salicylate	d other aquatic invertebrates. : EC50: 0,39 mg/l Exposure time: 96 h		
12.2 Persistence and degra	adability		
Biodegradability hexyl salicylate	 Result: May not be readily biodegradable 20 % Method: Directive 67/548/EEC Annex V, C.4.D. 		
12.3 Bioaccumulative pote	ential		
12.4 Mobility in soil			
Mobility	: no data available		
12.5 Results of PBT and v	PvB assessment		

This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT)., This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

2.6 Other adverse effects	
Additional ecological information	: There is no data available for this product.
13. Disposal consideration	ons
3.1 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.

14. Transport information

ADR



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UN number	: 3082		
Description of the goods	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, I (HEXYL SALICYLATE)	LIQUID, N.O.S.	
Labels	: 9		
Packing group	: III		
Environmentally hazardous	: yes		
IATA			
UN number	: 3082		
Description of the goods	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, I (HEXYL SALICYLATE)	LIQUID, N.O.S.	
Labels	: 9		
Packing group	: III		
Environmentally hazardous	: yes		
IMDG	2002		
UN number	: 3082		
Description of the goods	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, I	LIQUID, N.O.S.	
T 1 1	(HEXYL SALICYLATE)		
Labels	: 9		
Packing group	: III		
Marine pollutant	: yes		
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

Labelling — EU Directives 67/548/EEC or 1999/45/EC—

Symbol(s) :	Xi N	Irritant Dangerous for the environment
R-phrase(s) :		Irritating to skin. May cause sensitization by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in atic environment.
S-phrase(s) :	S24 S37 S61 Safety c	Avoid contact with skin. Wear suitable gloves. Avoid release to the environment. Refer to special instructions/ lata sheets.
Water contaminating class	:	WGK 2 water endangering



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(Germany)

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

16. Other information Full text of R-phrases referred to under sections 2 and 3				
R38	Irritating to skin.			
R41	Risk of serious damage to eyes.			
R43	May cause sensitization by skin contact.			
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.			
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.			
R62	Possible risk of impaired fertility.			

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

H301	Toxic if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	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.



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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.