

# SAFETY DATA SHEET

In accordance with REACH Regulation EC No.1907/2006

Product: DARK CODE MAN PN796408

Version: 1

## Section 1. Identification of the substance or the mixture and of the supplier

### 1.1 Product Identifier

Product identifier: DARK CODE MAN PN796408 (Contains:1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone, Dihydromyrcenol, Geraniol, dl-Limonene (racemic))

Other identifiers: None

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

Product uses: Fragrance

### 1.3 Details of the supplier of the safety data sheet

Company name: AROMATIC FLAVOURS & FRAGRANCES EUROPE

Company address: AFF HOUSE  
STATION ROAD INDUSTRIAL ESTATE  
ELMSWELL, BURY ST. EDMUNDS  
SUFFOLK IP30 9HR  
UNITED KINGDOM

Contact: Zuzanna Przywara

E-Mail address: zprzywara@af-f.com

Company phone: 01359 242459

### 1.4 Emergency telephone number

Emergency phone: 01359 242459

## Section 2. Hazards identification

### 2.1 Classification of the substance or mixture

#### **Classification under Regulation (EC) No 1272/2008**

Class and category of danger: Skin Corrosion / Irritation Category 2  
Eye Damage / Irritation Category 2  
Sensitization - Skin Category 1  
Hazardous to the Aquatic Environment - Acute Hazard Category 1  
Hazardous to the Aquatic Environment - Long-term Hazard Category 1  
H315, Causes skin irritation.  
H317, May cause an allergic skin reaction.  
H319, Causes serious eye irritation.  
H410, Very toxic to aquatic life with long lasting effects.

#### **Classification under Directive 1999/45/EC**

Hazard symbols: Xi, Irritant.  
N, Dangerous for the environment.

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

## 2.2 Label elements

**Signal word:** Warning

**Hazard statements:** H315, Causes skin irritation.  
H317, May cause an allergic skin reaction.  
H319, Causes serious eye irritation.  
H410, Very toxic to aquatic life with long lasting effects.

**Supplemental Information:** EUH208, Contains Piperonal, Hexyl Cinnamal, Hydroxycitronellal, alpha-isomethyl ionone, alpha-Methyl-3,4-methylene-dioxyhydrocinnamic aldehyde, 6,7-Dihydro-1,1,2,3,3-pentamethyl-4 (5H)-indanone, Citral, Coumarin, Eucalyptol, Geranyl acetate, Nerol, d-alpha.-Pinene, d-Limonene, omega-Pentadecalactone, Acetic acid, anhydride, reaction products with 1,5,10-trimethyl-1,5,9-cyclododecatriene, 3-Methylcyclopentadecenone. May produce an allergic reaction.

**Precautionary statements:** P261, Avoid breathing vapour or dust.  
P264, Wash hands and other contacted skin thoroughly after handling.  
P272, Contaminated work clothing should not be allowed out of the workplace.  
P273, Avoid release to the environment.  
P280, Wear protective gloves/eye protection/face protection.  
P302/352, IF ON SKIN: Wash with plenty of soap and water.  
P305/351/338, IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333/313, If skin irritation or rash occurs: Get medical advice/attention.  
P337/313, If eye irritation persists: Get medical advice/attention.  
P362, Take off contaminated clothing and wash before reuse.  
P391, Collect spillage.  
P501, Dispose of contents/container to approved disposal site, in accordance with local regulations.

**Pictograms:**



**Other hazards:** None

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## Section 3. Composition / information on ingredients

### 3.2 Mixtures

Contains:

Name	CAS	EC	REACH Registration No.	%	Classification for (DSD) 67/548/EEC	Classification for (CLP) 1272/2008
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1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone	54464-57-2	259-174-3		17.20%	Xi-N ; R38-R43-R51/53	SCI 2-SS 1B-EH A1-EH C1;H315-H317-H410,-
Cedrol	77-53-2	201-035-6		5.82%	N ; R51/53	EH C2;H411,-
Dihydromyrcenol	18479-58-8	242-362-4		5.80%	Xi ; R38	SCI 2-EDI 2;H315-H319,-
Hexamethylindanopyran	1222-05-5	214-946-9		5.00%	N ; R50/53	EH A1-EH C1;H410,-
dl-Limonene (racemic)	138-86-3	205-341-0		4.54%	Xn-N ; R10-R38-R43-R65-R50/53	FL 3-SCI 2-SS 1-SS 1B-AH 1-EH A1-EH C1;H226-H304-H315-H317-H410,-
1-(2-tert.-Butyl cyclohexyloxy)-2-butanol	139504-68-0	412-300-2		4.50%	N ; R51/53	EH C2;H320-H411,-
Linalyl acetate	115-95-7	204-116-4		2.70%	Xi ; R38	SCI 2-EDI 2;H315-H319,-
Hydroxycitronellal	107-75-5	203-518-7		2.00%	Xi ; R36-R43	EDI 2-SS 1B;H317-H319,-
alpha-Methyl-3,4-methylene-dioxyhydrocinnamic aldehyde	1205-17-0	214-881-6		1.70%	Xi-N ; R43-R51/53	SS 1B-EH C2;H317-H411,-
3,7-Dimethyl-1,6-nonadien-3-ol	10339-55-6	233-732-6		1.70%	Xi ; R38	SCI 2-EDI 2;H315-H319,-
omega-Pentadecalactone	106-02-5	203-354-6		1.50%	Xi ; R43	SS 1B-EH C2;H317-H411,-
Linalool	78-70-6	201-134-4		1.33%	Xi ; R38	SCI 2-EDI 2;H315-H319,-
Acetic acid, anhydride, reaction products with 1,5,10-trimethyl-1,5,9-cyclododecatriene	144020-22-4	482-330-9		1.25%	Xi-N ; R38-R43-R50/53	SS 1B-EH A1-EH C1;H317-H410,-
alpha-isomethyl ionone	127-51-5	204-846-3		1.20%	Xi-N ; R43-R36/38-R51/53	SCI 2-SS 1-SS 1B-EH C2; H315-H317-H319-H320-H411,-
d-.alpha.-Pinene	7785-70-8	232-087-8		1.10%	Xn-N ; R10-R38-R43-R65-R50/53	FL 3-SCI 2-SS 1B-AH 1-EH A1-EH C1;H226-H304-H315-H317-H410,-
Coumarin	91-64-5	202-086-7		1.09%	Xn ; R22-R43	ATO 4-SS 1B-STO-RE 2; H302-H317-H373,-
Hexyl Cinnamal	101-86-0	202-983-3		0.80%	Xi ; R38-R43	SS 1B-EH C2;H317-H411,-
Globalide	111879-80-2	422-320-3		0.80%	N ; R50/53	EH A1-EH C1;H410,-
Amyl salicylate	2050-08-0	911-280-7		0.70%	Xn-N ; R22-R50/53	ATO 4-EH A1-EH C1; H302-H410,-
2-tert-Butylcyclohexyl acetate	88-41-5	201-828-7		0.60%	N ; R51/53	EH C2;H411,-
beta-Ionone	14901-07-6	238-969-9		0.50%	N ; R51/53	EH C2;H411,-
6,7-Dihydro-1,1,2,3,3-pentamethyl-4(5H)-indanone	33704-61-9	251-649-3		0.50%	Xi-N ; R43-R36/38-R51/53	SCI 2-EDI 2-SS 1B-EH C2; H315-H317-H319-H411,-
3-Methylcyclopentadecanone	63314-79-4	429-900-5	01-0000017618-62	0.40%	Xi-N ; R43-R50/53	SS 1B-EH A1-EH C1;H317-H410,-
Geraniol	106-24-1	203-377-1		0.37%	Xi ; R38-R41-R43	SCI 2-EDI 1-SS 1;H315-H317-H318,-
p-Mentha-1,4-diene	99-85-4	202-794-6		0.31%	Xn ; R10-R65	FL 3-AH 1;H226-H304,-
Nerol	106-25-2	203-378-7		0.30%	Xi ; R43-R36/38	SCI 2-EDI 2-SS 1B;H315-H317-H319,-
Piperonal	120-57-0	204-409-7		0.25%	Xi ; R43	SS 1B;H317,-
Eucalyptol	470-82-6	207-431-5		0.24%	Xi ; R10-R43	FL 3-SS 1B;H226-H317,-
alpha-Cedrene	469-61-4	207-418-4		0.20%	Xn-N ; R65-R50/53	AH 1-EH A1-EH C1;H304-H410,-
Cyclopentanone 2,2,5-Trimethyl-5-Pentyl	65443-14-3	265-779-3		0.20%	N ; R51/53	EH C2;H411,-
d-Limonene	5989-27-5	227-813-5		0.14%	Xn-N ; R10-R38-R43-R65-R50/53	FL 3-SCI 2-SS 1-SS 1B-AH 1-EH A1-EH C1;H226-

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		227-813-5		0.14%	Xn-N ; R10-R38-R43-R65-R50/53	H304-H315-H317-H410,-
Citral	5392-40-5	226-394-6		0.11%	Xi ; R38-R43	SCI 2-EDI 2-SS 1B;H315-H317-H319,-
3,7-Dimethyl-1,3,6-octatriene	13877-91-3	237-641-2		0.11%	Xn ; R10-R65	FL 3-AH 1;H226-H304,-
Geranyl acetate	105-87-3	203-341-5		0.10%	Xi-N ; R38-R43-R51/53	SCI 2-SS 1-EH C3;H315-H317-H412,-
beta-Caryophyllene	87-44-5	201-746-1		0.10%	Xn ; R65	AH 1;H304,-
p-Cymene	99-87-6	202-796-7		0.08%	Xn-N ; R10-R65-R51/53	FL 3-AH 1-EH C2;H226-H304-H411,-
Myrcene	123-35-3	204-622-5		0.05%	Xn ; R10-R38-R65	FL 3-SCI 2-EDI 2-AH 1;H226-H304-H315-H319,-
Terpinolene	586-62-9	209-578-0		0.005%	Xn-N ; R43-R65-R50/53	SS 1B-AH 1-EH A1-EH C1;H304-H317-H410,-
1,3,5-Undecatriene	16356-11-9	240-416-1		0.002%	Xn-N ; R38-R65-R50/53	SCI 2-AH 1-EH A1-EH C1;H304-H315-H410,-
alpha-Pinene	80-56-8	201-291-9		0.002%	Xn ; R10-R38-R43-R65	FL 3-SCI 2-SS 1B-AH 1;H226-H304-H315-H317,-

**Substances with Community workplace exposure limits, not listed above:**

Name	CAS	EC	%
Diethyl phthalate	84-66-2	201-550-6	5.00%
Ethyl alcohol	64-17-5	200-578-6	0.002%

**Substances that are persistent, bioaccumulative and toxic or very persistent and very bioaccumulative, greater than 0.1%:**

Not Applicable

**Section 4. First-aid measures****4.1 Description of first aid measures**

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**4.2 Most important symptoms and effects, both acute and delayed**

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

**4.3 Indication of any immediate medical attention and special treatment needed**

None expected, see Section 4.1 for further information.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

Suitable media: Carbon dioxide, Dry chemical, Foam.

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## 5.2 Special hazards arising from the substance or mixture

In case of fire, may be liberated: Carbon monoxide, Unidentified organic compounds.

## 5.3 Advice for fire fighters:

In case of insufficient ventilation, wear suitable respiratory equipment.

## Section 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures:

Avoid inhalation. Avoid contact with skin and eyes. See protective measures under Section 7 and 8.

### 6.2 Environmental precautions:

Keep away from drains, surface and ground water, and soil.

### 6.3 Methods and material for containment and cleaning up:

Remove ignition sources. Provide adequate ventilation. Avoid excessive inhalation of vapours. Contain spillage immediately by use of sand or inert powder. Dispose of according to local regulations.

### 6.4 Reference to other sections:

Also refer to sections 8 and 13.

## Section 7. Handling and storage

### 7.1 Precautions for safe handling:

Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use personal protective equipment as required. Use in accordance with good manufacturing and industrial hygiene practices. Use in areas with adequate ventilation. Do not eat, drink or smoke when using this product.

### 7.2 Conditions for safe storage, including any incompatibilities:

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Ground/bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

### 7.3 Specific end use(s):

Use in accordance with good manufacturing and industrial hygiene practices.

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Workplace exposure limits:

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Ingredient	CAS	EC	Description			Reference
Diethyl phthalate	84-66-2	201-550-6	Long-term exposure limit (8-hour TWA reference period)	-	5	UK EH40 Oct 2007
			Short-term exposure limit (15-minute reference period)	-	10	UK EH40 Oct 2007
Ethyl alcohol	64-17-5	200-578-6	Long-term exposure limit (8-hour TWA reference period)	1000	1920	UK EH40 Oct 2007
			Short-term exposure limit (15-minute reference period)	-	-	UK EH40 Oct 2007

## 8.2 Exposure Controls

### Eye / Skin Protection

Wear protective gloves/eye protection/face protection

### Respiratory Protection

Ensure adequate and ongoing ventilation is maintained in order to prevent build up of excessive vapour and to ensure occupational exposure limits are adhered to. If appropriate, and depending on your patterns and volumes of use, the following engineering controls may be required as additional protective measures: a) 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. b) Employ the use of Personal protective equipment - an approved, properly fitted respirator with organic vapour cartridges or canisters and particulate filters. c) 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. d) Use closed systems for transferring and processing this material.

Also refer to Sections 2 and 7.

## Section 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Pale Yellow To Yellow in 8ml vial
Odour:	Not determined
pH:	Not determined
Initial boiling point / range:	Not determined
Flash point:	> 61 °C
Vapour pressure:	Not determined
Relative density:	0.9530 - 0.9730
Solubility(ies):	Not determined
9.2 Other information:	None available

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## Section 10. Stability and reactivity

### 10.1 Reactivity:

Presents no significant reactivity hazard, by itself or in contact with water.

### 10.2 Chemical stability:

Good stability under normal storage conditions.

### 10.3 Possibility of hazardous reactions:

Not expected under normal conditions of use.

### 10.4 Conditions to avoid:

Avoid extreme heat.

### 10.5 Incompatible materials:

Avoid contact with strong acids, alkalis or oxidising agents.

### 10.6 Hazardous decomposition products:

Not expected.

## Section 11. Toxicological information

### 11.1 Information on toxicological effects

This mixture has not been tested as a whole for health effects. The health effects have been calculated using the methods outlined in Regulation (EC) No 1272/2008 (CLP).

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

<b>Assumed Toxicity Value (LD50 or ATE) for Acute Oral Toxicity:</b>	>5000
<b>Assumed Toxicity Value (LD50 or ATE) for Acute Dermal Toxicity:</b>	Not Applicable
<b>Assumed Toxicity Value (LC50 or ATE) for Acute Inhalation Toxicity:</b>	Not Available
<b>Inhalation Route:</b>	Not Available

### Information about hazardous ingredients in the mixture

Ingredient	CAS	EC	LD50/ATE Oral	LD50/ATE Dermal	LC50/ATE Inhalation	LC50 Route
Coumarin	91-64-5	202-086-7	500	Not available	Not available	Not available

Refer to Sections 2 and 3 for additional information.



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## Section 12. Ecological information

### 12.1 Toxicity:

Very toxic to aquatic life with long lasting effects.

**12.2 Persistence and degradability:** Not available

**12.3 Bioaccumulative potential:** Not available

**12.4 Mobility in soil:** Not available

### 12.5 Results of PBT and vPvB assessment:

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

**12.6 Other adverse effects:** Not available

## Section 13. Disposal considerations

### 13.1 Waste treatment methods:

Dispose of in accordance with local regulations. Avoid disposing into drainage systems and into the environment. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## Section 14. Transport information

**14.1 UN number:** UN3082

**14.2 UN Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone, Hexamethylindanopyran)

**14.3 Transport hazard class(es):** 9

**Sub Risk:** -

**14.4. Packing Group:** III

**14.5 Environmental hazards:** This is an environmentally hazardous substance.

**14.6 Special precautions for user:** None additional

**14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**

Not applicable

## Section 15. Regulatory information

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

None additional

### 15.2 Chemical Safety Assessment

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

## Section 16. Other information

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**Concentration % Limits:** EH A1=75.46% EH C1=75.46% EH C2=7.23% EH C3=0.72254141% EH C4=0.49113977% SCI 2=28.12% EDI 2=54.38% EDI 2A=43.69% SS 1=5.81%

**Total Fractional Values:** EH A1=1.33 EH C1=1.33 EH C2=13.84 EH C3=138.40 EH C4=203.61 SCI 2=3.56 EDI 2=1.84 EDI 2A=2.29 SS 1=17.20

**Key to revisions:**

Not applicable

**Key to abbreviations:**

Abbreviation	Meaning
AH 1	Aspiration Hazard Category 1
ATO 4	Acute Toxicity - Oral Category 4
EDI 1	Eye Damage / Irritation Category 1
EDI 2	Eye Damage / Irritation Category 2
EH A1	Hazardous to the Aquatic Environment - Acute Hazard Category 1
EH C1	Hazardous to the Aquatic Environment - Long-term Hazard Category 1
EH C2	Hazardous to the Aquatic Environment - Long-term Hazard Category 2
EH C3	Hazardous to the Aquatic Environment - Long-term Hazard Category 3
FL 3	Flammable Liquid, Hazard Category 3
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H320	Causes eye irritation.
H373	May cause damage to organs (organs) through prolonged or repeated exposure (exposure route).
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
P210	Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe vapour or dust.
P261	Avoid breathing vapour or dust.
P264	Wash hands and other contacted skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.

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P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.
P301/310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301/312	IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell.
P302/352	IF ON SKIN: Wash with plenty of soap and water.
P303/361/353	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P305/351/338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P331	Do not induce vomiting.
P332/313	If skin irritation occurs: Get medical advice/attention.
P333/313	If skin irritation or rash occurs: Get medical advice/attention.
P337/313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P370/378	In case of fire: Use carbon dioxide, dry chemical, foam for extinction.
P391	Collect spillage.
P403/235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to approved disposal site, in accordance with local regulations.
SCI 2	Skin Corrosion / Irritation Category 2
SS 1	Sensitization - Skin Category 1
SS 1B	Sensitization - Skin Category 1B
STO-RE 2	Specific Target Organ Toxicity (Repeated Exposure) Category 2

The information in this safety data sheet is to the best of our knowledge true and accurate but all data, instructions, recommendations and/or suggestions are made without guarantee.