



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : ATOMIUM 2
Product code : 16610D.

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

1.3. Details of the supplier of the safety data sheet

Registered company name : FLORESSENCE.
Address : Z.I DE LA FESTRE SUD .06535.ST CEZAIRE SUR SIAGNE.FRANCE.
Telephone : 04 93 40 59 60. Fax : 04 93 40 59 69.
danielle.maniquant@elixens.com
www.elixens.com
Appel d'Urgence: +33 (0) 2 98 33 10 10 UTMD001

1.4. Emergency telephone number : +33 (0) 1 45 42 59 59.

Association/Organisation : INRS .

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Skin sensitisation, Category 1 (Skin Sens. 1, H317).
Hazardous to the aquatic environment - Chronic hazard, Category 2 (Aquatic Chronic 2, H411).
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Skin sensitisation (Xi, R 43).
Aquatic environmental hazard, chronic toxicity: toxic (N, R 51/53).
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS09



GHS07

Signal Word :

WARNING

Product identifiers :

EC 259-174-3
601-029-007A

OTNE [1-(1,2,3,4,5,6,7,8-OCTAHYDRO-2,3,8,8-TETRAMETHYL-2-NAPHTALENYL)-ETHANONE
(R)-P-MENTHA-1,8-DIENE

Hazard statements :

H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response :

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P321 Specific treatment (see ... on this label).

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

Precautionary statements - Disposal :

P501 Dispose of contents/container to ...

In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.

Hazard symbols :



Irritant



Dangerous for the environment

Contains :

601-029-00-7

(R)-P-MENTHA-1,8-DIENE

EC 259-174-3

OTNE [1-(1,2,3,4,5,6,7,8-OCTAHYDRO-2,3,8,8-TETRAMETHYL-2-NAPHTALENYL)-ETHANONE

Risk phrase :

R 51/53

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 43

May cause sensitisation by skin contact.

Safety phrase :

S 24

Avoid contact with skin.

S 37

Wear suitable gloves.

S 61

Avoid release to the environment. Refer to special instructions/Safety data sheets.

S 60

This material and its container must be disposed of as hazardous waste.

S 57

Use appropriate container to avoid environmental contamination.

2.3. Other hazards

No data available.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

No substances fulfil the criteria set forth in annexe II section A of the REACH regulation (EC) n° 1907/2006.

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	67/548/EEC	Note	%
INDEX: I54464_57_2 CAS: 54464-57-2 EC: 259-174-3 OTNE [1-(1,2,3,4,5,6,7,8-OCTAHYDRO-2,3,8,8-TETRAMETHYL-2-NAPHTALENYL)-ETHANONE]	GHS07, GHS09 Wng Aquatic Chronic 2, H411 Skin Irrit. 2, H315 Skin Sens. 1, H317	Xi,N Xi;R38-R43 N;R51/53		2.5 <= x % < 10
INDEX: I105_95_3 CAS: 105-95-3 EC: 203-347-8 ETHYLENE BRASSYLATE	GHS09 Aquatic Chronic 2, H411	N N;R51/53		1 <= x % < 2.5
INDEX: I_HYDROC HYDROCARBONS	GHS08 Dgr Asp. Tox. 1, H304	Xn		1 <= x % < 2.5
INDEX: 601-029-00-7 CAS: 5989-27-5 EC: 227-813-5 (R)-P-MENTHA-1,8-DIENE	GHS02, GHS07, GHS09 Wng Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 1, H410	Xi,N Xi;R38-R43 N;R50/53 R10		1 <= x % < 2.5

INDEX: I101_86_0 CAS: 101-86-0 EC: 202-983-3 ALPHA-HEXYL CINNAMIC ALDEHYDE (HCA)	GHS07, GHS09 Wng Aquatic Chronic 2, H411 Skin Sens. 1, H317	Xi Xi;R38-R43		0 <= x % < 1
INDEX: I32388_55_9 CAS: 32388-55-9 EC: 251-020-3 ACETYL CEDRENE	GHS07, GHS09 Wng Aquatic Chronic 1, H410 Skin Sens. 1, H317	Xi,N Xi;R43 N;R50/53		0 <= x % < 1
INDEX: I0_0_3 PINENES (ALPHA OR BETA)	GHS09, GHS07, GHS08, GHS02 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Sens. 1, H317 Aquatic Chronic 1, H410	Xn,N Xn;R65 Xi;R43 N;R50/53 R10		0 <= x % < 1
INDEX: 605-019-00-3 CAS: 5392-40-5 EC: 226-394-6 CITRAL	GHS07 Wng Skin Irrit. 2, H315 Skin Sens. 1, H317	Xi Xi;R38-R43		0 <= x % < 1
INDEX: I127_51_5 CAS: 127-51-5 EC: 204-846-3 ALPHA-ISOMETHYL-IONONE	GHS07, GHS09 Wng Aquatic Chronic 2, H411 Skin Sens. 1, H317	Xi,N Xi;R43 N;R51/53		0 <= x % < 1
INDEX: I56973_85_4 CAS: 56973-85-4 EC: 260-486-7 1-(5,5-DIMETHYL-1-CYCLOHEXEN-1-YL)P ENT-4-EN-1-ONE	GHS07 Wng Skin Sens. 1, H317	Xi Xi;R43		0 <= x % < 1
INDEX: I80_54_6 CAS: 80-54-6 EC: 201-289-8 P-TERT-BUTYL-ALPHA-METHYLHYDROCI NNAMIC ALDEHYDE (LILIAL)	GHS07, GHS08, GHS09 Wng Acute Tox. 4, H302 Aquatic Chronic 2, H411 Repr. 2, H361 Skin Irrit. 2, H315 Skin Sens. 1, H317	Xn,N Repr. Cat. 3;R62 Xn;R22 Xi;R38-R43 N;R51/53		0 <= x % < 1

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of splashes or contact with eyes :

Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non fire-fighters

Avoid any contact with the skin and eyes.

For fire-fighters

Fire-fighters will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No data available.

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Butyl Rubber (Isobutylene-isoprene copolymer)

Recommended properties :

- Impervious gloves in accordance with standard EN374

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state : fluid liquid.

Important health, safety and environmental information

pH : Not relevant.

Boiling point/boiling range : not relevant.

Flash Point Interval : 60°C < PE <= 93°C

Vapour pressure : not relevant.

Density : not stated.

Water solubility : Insoluble.

Melting point/melting range : not relevant.

Self-ignition temperature : not relevant.

Decomposition point/decomposition range : not relevant.

9.2. Other information

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO₂)

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Splashes in the eyes may cause irritation and reversible damage

May cause an allergic reaction by skin contact.

11.1.1. Substances

Acute toxicity :

P-TERT-BUTYL-ALPHA-METHYLHYDROCINNAMIC ALDEHYDE (LILIAL) (CAS: 80-54-6)

Oral route : DL50 = 1390 mg/kg

ALPHA-HEXYL CINNAMIC ALDEHYDE (HCA) (CAS: 101-86-0)

Oral route : DL50 = 3100 mg/kg

11.1.2. Mixture

No toxicological data available for the mixture.

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 5989-27-5 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

SECTION 12 : ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

No aquatic toxicity data available for the substances.

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK) :

WGK 2 (VwVwS vom 27/07/2005, KBws) : Hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2011 - IMDG 2010 - ICAO/IATA 2012).

14.1. UN number

3082

14.2. UN proper shipping name

UN3082=ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

((r)-p-mentha-1,8-diene)

14.3. Transport hazard class(es)

- Classification :



9

14.4. Packing group

III

14.5. Environmental hazards

- Environmentally hazardous material :



14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	9	M6	III	9	90	5 L	274 335 601	E1	3	E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ
	9	-	III	5 L	F-A,S-F	274 335	E1

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	9	-	III	964	450 L	964	450 L	A97 A158	E1
	9	-	III	Y964	30 kg G	-	-	A97 A158	E1

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

No data available.

SECTION 15 : REGULATORY INFORMATION

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

- Particular provisions :

No data available.

- German regulations concerning the classification of hazards for water (WGK) :

Germany : WGK 2 (VwVwS vom 27/07/2005, KBws)

- Standardised American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704) :

NFPA 704, Labelling: Health=2 Inflammability=1 Instability/Reactivity=1 Specific Risk=none



15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Title for H, EUH and R indications mentioned in section 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.
H361	Suspected of damaging fertility or the unborn child .
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

R 10	Flammable.
R 22	Harmful if swallowed.
R 38	Irritating to skin.
R 43	May cause sensitisation by skin contact.
R 50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 62.F3	Possible risk of impaired fertility.
R 65	Harmful: may cause lung damage if swallowed.

Abbreviations :

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS07 : Exclamation mark

GHS09 : Environment