

**EUGENOL - ART.11420/21/22**



**SAFETY DATA SHEET**

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

**1.1. Product identifier**

Product name : EUGENOL

Product code : ART.11420/21/22.

UFI : JSY4-W058-300R-QK1A

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

For dental professional use only.

**1.3. Details of the supplier of the safety data sheet**

Registered company name : PRODUITS DENTAIRES SA.

Address : Rue des Bosquets 18 .1800 .Vevey .Switzerland.

Telephone : +41 21 921 26 31. Fax : .

info@pd-dental.com

https://pd-dental.com

**1.4. Emergency telephone number : +41 21 921 26 31.**

Association/Organisation : .

**SECTION 2 : HAZARDS IDENTIFICATION**

**2.1. Classification of the substance or mixture**

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

Eye irritation, Category 2 (Eye Irrit. 2, H319).

Skin sensitisation, Category 1B (Skin Sens. 1B, H317).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

**2.2. Label elements**

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

Hazard pictograms :



GHS07

Signal Word :

WARNING

Product identifiers :

EC 202-589-1 EUGENOL

Hazard statements :

H317

May cause an allergic skin reaction.

H319

Causes serious eye irritation.

Precautionary statements - Prevention :

P261

Avoid breathing vapours.

P264

Wash hands thoroughly after handling.

P280

Wear protective gloves according to the hygienic rules in force in dental surgeries.

Precautionary statements - Response :

P302 + P352

IF ON SKIN: Wash with plenty of water

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P305 + P351 + P338

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

P333 + P313

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

P337 + P313

If eye irritation persists: Get medical advice/attention.

Precautionary statements - Disposal :

P501

Dispose of contents/container according to the hygienic rules in force in dental surgeries and according to the legislation in force.

**2.3. Other hazards**

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances  $\geq 0.1\%$  with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

**SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures****Composition :**

Identification	Classification (EC) 1272/2008	Note	%
CAS: 97-53-0 EC: 202-589-1 EUGENOL	GHS07 Wng Skin Sens. 1B, H317 Eye Irrit. 2, H319		100%

**Information on ingredients :**

(Full text of H-phrases: see section 16)

**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 exposure by inhalation :**

In the event of massive inhalation, remove the person exposed to fresh air and seek medical attention.

**In the event of splashes or contact with eyes :**

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

If there is any redness, pain or visual impairment, consult an ophthalmologist.

**In the event of splashes or contact with skin :**

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.

Be careful with product which can remain between the skin and the clothes, the watch, the jewels.

Wash the skin thoroughly with soap and fresh water.

**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.

Seek medical attention immediately, showing the label.

Do not induce vomiting.

**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.

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**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
- BC powder
- carbon dioxide (CO<sub>2</sub>)
- stable foams in alcohols

**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 (CO<sub>2</sub>)

**5.3. Advice for firefighters**

Wear self-contained breathing apparatus.

**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 first aid worker**

Avoid any contact with the skin and eyes.

**For first aid worker**

First aid workers will be equipped with suitable personal protective equipment (See section 8).

Avoid any contact with the skin and eyes.

**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**

Respect storage precautions mentioned on the packaging or in the instructions for use.

The persons who have medical histories of cutaneous sensitization must use this product with all the required precautions.

**7.1. Precautions for safe handling**

Always wash hands after handling.

Avoid any contact with skin and eyes.

**Fire prevention :**

Prevent access by unauthorised personnel.

**Recommended equipment and procedures :**

For personal protection, see section 8.

Avoid skin and eye contact with this mixture.

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

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**7.2. Conditions for safe storage, including any incompatibilities**

Keep in the original container, respect the storage temperatures mentioned on the container, the leaflet and the box.

**Storage**

Respect storage precautions mentioned on the packaging or in the instructions for use.

**Packaging**

Always conserve in the original packaging.

**7.3. Specific end use(s)**

Consult instructions for use enclosed.

**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) :

**- Eye / face protection**

Avoid contact with eyes.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

**- Hand protection**

Wear gloves according to the hygienic rules in force in dental surgeries.

**- Body protection**

Avoid skin contact.

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****Physical state**

Physical state : Fluid liquid.

**Colour**

Colour: Colourless, can darken with time.

**Odour**

Odour threshold : Not stated.

**Melting point**

Melting point/melting range : Not relevant.

**Freezing point**

Freezing point / Freezing range : -7.5 °C (1 atm)

**Boiling point or initial boiling point and boiling range**

Boiling point/boiling range : Not relevant.

**Flammability**

Flammability (solid, gas) : Not stated.

This material is combustible, but does not ignite easily.

**Lower and upper explosion limit**

Explosive properties, lower explosivity limit (%) : Not stated.

Explosive properties, upper explosivity limit (%) : Not stated.

**Flash point**

Flash Point : 124.00 °C.

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**Auto-ignition temperature**

Self-ignition temperature : 380 °C.

**Decomposition temperature**

Decomposition point/decomposition range : Not relevant.

**pH**

pH (aqueous solution) : Not stated.

pH : Not relevant.

**Kinematic viscosity**Viscosity : 7.863 mm<sup>2</sup>/s at 25 °CViscosity : 7 mm<sup>2</sup>/s <= v <= 14 mm<sup>2</sup>/s (40°C)**Solubility**

Water solubility : Partially soluble. 1,154 mg/l at 20 °C

Fat solubility : Not stated.

**Partition coefficient n-octanol/water (log value)**

Partition coefficient: n-octanol/water : 1.83 (pH value: 5.5, 30 °C)

**Vapour pressure**

Vapour pressure (50°C) : Not relevant.

**Density and/or relative density**Density : 1.067 g/cm<sup>3</sup>**Relative vapour density**

Vapour density : Not stated.

**9.2. Other information**

Index of refraction : 1.540 - 1.542

**9.2.1. Information with regard to physical hazard classes**

No data available.

**9.2.2. Other safety characteristics**

No data available.

**Miscibility**

Miscibility : Ethanol

**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.

Do not use if the expiry date is exceeded.

**10.3. Possibility of hazardous reactions**

No data available.

**10.4. Conditions to avoid**

Avoid :

- heat
- exposure to light

**10.5. Incompatible materials**

Keep away from :

- oxidising agents

**10.6. Hazardous decomposition products**

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

**EUGENOL - ART.11420/21/22****SECTION 11 : TOXICOLOGICAL INFORMATION****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

May cause an allergic reaction by skin contact.

**11.1.1. Substances**

No toxicological data available for the substances.

**11.1.2. Mixture****Acute toxicity :**

Oral route : Harmful if swallowed.  
LD50 = 1930 mg/kg

**Serious damage to eyes/eye irritation :**

Causes serious eye irritation.

Corneal haze : 2 ≤ Average score < 3 and effects totally reversible within 21 days of observation

The irritant classification based on a high/low pH has been confirmed by irritation tests.

**Respiratory or skin sensitisation :**

May cause an allergic skin reaction.

Local lymph node stimulation test : Sensitiser.

Guinea Pig Maximisation Test (GMPT) : Sensitiser.

Buehler Test : Sensitiser.

**11.2. Information on other hazards****Monograph(s) from the IARC (International Agency for Research on Cancer) :**

CAS 97-53-0 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

**SECTION 12 : ECOLOGICAL INFORMATION****12.1. Toxicity****12.1.1. Substances**

EUGENOL (CAS: 97-53-0)

Fish toxicity : LC50 = 13 mg/l  
Duration of exposure : 24 h

Crustacean toxicity : EC50 = 1.05 mg/l  
Duration of exposure : 48 h

Algae toxicity : ECr50 = 24 mg/l  
Duration of exposure : 72 h

**12.1.2. Mixtures**

Fish toxicity : No observed effect.  
LC50 = 13 mg/l  
Duration of exposure : 24 h

Crustacean toxicity : No observed effect.  
EC50 = 1.05 mg/l  
Duration of exposure : 48 h

Algae toxicity : No observed effect.

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ECr50 = 24 mg/l

Duration of exposure : 72 h

**12.2. Persistence and degradability**

**12.2.1. Substances**

EUGENOL (CAS: 97-53-0)

Biodegradability :

Rapidly degradable.

**12.2.2. Mixtures**

Biodegradation :

No data on decomposition is available, the mixture is not considered to decompose rapidly.

**12.3. Bioaccumulative potential**

**12.3.1. Substances**

EUGENOL (CAS: 97-53-0)

Octanol/water partition coefficient :

log K<sub>ow</sub> = 1.83

**12.3.2. Mixtures**

Octanol/water partition coefficient :

log K<sub>ow</sub> = 1.83

Does not have the potential for bioconcentration.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Endocrine disrupting properties**

No data available.

**12.7. Other adverse effects**

No data available.

**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, 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**

Exempt from transport classification and labelling.

**14.1. UN number or ID number**

-

**14.2. UN proper shipping name**

-

**14.3. Transport hazard class(es)**

-

**14.4. Packing group**

-

**EUGENOL - ART.11420/21/22****14.5. Environmental hazards**

-

**14.6. Special precautions for user**

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**14.7. Maritime transport in bulk according to IMO instruments**

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**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Classification and labelling information included in section 2:**

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

**Container information:**

The mixture is contained in packaging that does not exceed 125 ml.

**Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):**

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):  
<https://echa.europa.eu/substances-restricted-under-reach>.

**Explosives precursors :**

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

**Particular provisions :**

No data available.

**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.

**Wording of the phrases mentioned in section 3 :**

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

**Abbreviations and acronyms :**

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

UFI : Unique formulation identifier.

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.

GHS07 : Exclamation mark

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.