

Name: CHLORBUTANOL - ART.11290



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 : CHLORBUTANOL

Product code : ART.11290.

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 DENTAIRE SA.

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

Telephone : +41 21 921 26 31. Fax : +41 21 921 39 79.

info@pdsa.ch

http://www.pdsa.ch

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.

Acute oral toxicity, Category 4 (Acute Tox. 4, H302).

Skin irritation, Category 2 (Skin Irrit. 2, H315).

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

Respiratory sensitisation, Category 1 (Resp. Sens. 1, H334).

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

Carcinogenicity, Category 1B (Carc. 1B, H350).

Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H335).

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.

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

Acute oral toxicity: harmful (Xn, R 22).

Skin irritation (Xi, R 38).

Eye irritation (Xi, R 36).

Irritant for the respiratory tract (Xi, R 37).

Respiratory sensitisation (Xi, R 42).

Skin sensitisation (Xi, R 43).

Category 2 carcinogen (T, R 45 Carc. Cat. 2).

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.

Name: CHLORBUTANOL - ART.11290

Hazard pictograms :



GHS07



GHS08

Signal Word :

DANGER

Product identifiers :

EC 202-589-1	EUGENOL
CAS 6001-64-5	CHLOROBUTANOL HEMIHYDRATE
EC 202-589-1	EUGENOL
EC 204-317-7	METHYL SALICYLATE
605-020-00-9	SAFROLE

Additional labeling :

For professional use only.

Hazard statements :

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer .

Precautionary statements - Prevention :

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements - Response :

P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P330	Rinse mouth.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Precautionary statements - Storage :

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
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Precautionary statements - Disposal :

P501	Dispose of contents/container to ...
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2.3. Other hazards

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

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

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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	%
CAS: 97-53-0 EC: 202-589-1 EUGENOL	GHS07, GHS08 Dgr Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Resp. Sens. 1, H334 STOT SE 3, H335	Xn Xn;R42/43-R22 Xi;R36/37/38		50 <= x % < 100
CAS: 6001-64-5 CHLOROBUTANOL HEMIHYDRATE	GHS07 Wng Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	Xn Xn;R22 Xi;R36/37/38		25 <= x % < 50
CAS: 97-53-0 EC: 202-589-1 EUGENOL	GHS07 Wng Eye Irrit. 2, H319 Skin Sens. 1B, H317	Xi Xi;R36-R43		2.5 <= x % < 10
CAS: 119-36-8 EC: 204-317-7 METHYL SALICYLATE	GHS07 Wng Acute Tox. 4, H302	Xn Xn;R22		1 <= x % < 2.5
CAS: 104-55-2 EC: 203-213-9 CINNAMIC ALDEHYDE *	GHS07 Wng Acute Tox. 4, H312 Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1A, H317	Xn Xn;R21 Xi;R38-R43		0 <= x % < 1
INDEX: 605-020-00-9 CAS: 94-59-7 EC: 202-345-4 SAFROLE	GHS08, GHS07 Dgr Carc. 1A, H350 Muta. 2, H341 Acute Tox. 4, H302	T Carc. Cat. 2;R45 Muta. Cat. 3;R68 Xn;R22	E [2]	0 <= x % < 1

Information on ingredients :

[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

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. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

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

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In the event of splashes or contact with eyes :

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

Refer the patient immediately to an ophtalmologiste.

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.

Wash the skin thoroughly with soap and fresh water.

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

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, administer activated medical charcoal and consult a doctor.

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

Symptoms of poisoning may even occur after several hours.

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
- powder
- foam
- carbon dioxide (CO₂)

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)
- toxic smokes

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 fire-fighters

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

For fire-fighters

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

Avoid inhaling the vapors.

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.

7.1. Precautions for safe handling

Always wash hands after handling.

Avoid any contact with skin and eyes.

The persons who have medical histories of cutaneous reactions, of asthma or of breathing difficulties must use this product with all the required precautions.

Fire prevention :

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Avoid inhaling vapors.

Avoid skin and eye contact with this mixture.

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

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) :



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- 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.

- Respiratory protection

Avoid breathing vapours.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information :

Physical state :	fluid liquid.
Colour:	brownish.
Odour:	Eugenol

Important health, safety and environmental information

pH :	5.00 . neutral.
Boiling point/boiling range :	not relevant.
Flash point interval :	not relevant.
Vapour pressure (50°C) :	not relevant.
Density :	1.142
Miscibility :	Ethanol
Water solubility :	Insoluble.
Viscosity :	8.2
Viscosity:	$\nu < 7 \text{ mm}^2/\text{s}$ (40°C) Method for determining the viscosity : DIN 51562-1 (Viscometry - Measurement of kinematic viscosity by means of the Ubbelohde viscometer - Part 1: Viscometer specification and measurement procedure).
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.

Do not use if the expiry date is exceeded.

10.3. Possibility of hazardous reactions

No data available.

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10.4. Conditions to avoid

Avoid :

- heat
- exposure to light

10.5. Incompatible materials

Keep away from :

- acids
- bases

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

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

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Harmful if swallowed.

May cause irreversible damage to the skin; namely inflammation of the skin or the formation of erythema and eschar or oedema following exposure up to four hours.

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 hypersensitivity of the respiratory tracts with effects taking the form of asthma, rhinitis/conjunctivitis or alveolitis.

May cause an allergic reaction by skin contact.

Presumed human carcinogen.

11.1.1. Substances

Acute toxicity :

CINNAMIC ALDEHYDE * (CAS: 104-55-2)

Oral route : DL50 = 2500 mg/kg

Dermal route : DL50 = 1100 mg/kg

METHYL SALICYLATE (CAS: 119-36-8)

Oral route : DL50 = 890 mg/kg

EUGENOL (CAS: 97-53-0)

Oral route : DL50 = 2300 mg/kg

EUGENOL (CAS: 97-53-0)

Oral route : DL50 = 1930 mg/kg
Species : Rat (recommended by the CLP)

Carcinogenicity :

CHLOROBUTANOL HEMIHYDRATE (CAS: 6001-64-5)

Carcinogenicity Test : Negative.

No carcinogenic effect.

11.1.2. Mixture

Respiratory or skin sensitisation :

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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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.

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

CAS 94-59-7 : IARC Group 2B : The agent is possibly carcinogenic to humans.

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

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.

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

Exempt from transport classification and labelling.

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2013 - IMDG 2012 - ICAO/IATA 2013).

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:

- Directive 67/548/EEC and its adaptations

- Directive 1999/45/EC and its adaptations

- Regulation EC 1272/2008 modified by regulation EC 618/2012

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- Container information:

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

Usage restrictions apply to the product : See annex XVII of EC regulation No. 1907/2006.

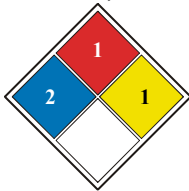
For professional users only.

- Particular provisions :

No data available.

- 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.

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

Hazard symbols :



Toxic

Contains :

605-020-00-9	SAFROLE
EC 204-317-7	METHYL SALICYLATE
EC 202-589-1	EUGENOL
CAS 6001-64-5	CHLOROBUTANOL HEMIHYDRATE
EC 202-589-1	EUGENOL

Risk phrase :

R 42/43	May cause sensitization by inhalation and skin contact.
R 36/37/38	Irritating to eyes, respiratory system and skin.
R 22	Harmful if swallowed.
R 45	May cause cancer.
	For professional use only.

Safety phrase :

S 23	Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
S 36/37	Wear suitable protective clothing and gloves.

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S 45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 53	Avoid exposure - obtain special instructions before use.
S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 38	In case of insufficient ventilation, wear suitable respiratory equipment.
S 39	Wear eye/face protection.
S 60	This material and its container must be disposed of as hazardous waste.
S 24	Avoid contact with skin.
	Product submitted to restrictions on the marketing and use: see Regulation (EC) No 1907/2006.

Title for H, EUH and R indications mentioned in section 3 :

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects .
H350	May cause cancer .
R 21	Harmful in contact with skin.
R 22	Harmful if swallowed.
R 36	Irritating to eyes.
R 36/37/38	Irritating to eyes, respiratory system and skin.
R 38	Irritating to skin.
R 42/43	May cause sensitization by inhalation and skin contact.
R 43	May cause sensitisation by skin contact.
R 45.C2	May cause cancer.
R 68	Possible risk of irreversible effects.

Abbreviations :

CMR: Carcinogenic, mutagenic or reprotoxic.
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
GHS08 : Health hazard