

SAFETY DATA SHEET

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

1.1. Product identifier

Product name: PULPOTEC LIQUID

Product code: ART.11564.

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

For dental professional use only.

To mix with PULPOTEC POWDER

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

GHS compliant.

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

Acute dermal toxicity, Category 4 (Acute Tox. 4, H312).

Acute inhalation toxicity, Category 3 (Acute Tox. 3, H331).

Skin corrosion, Category 1B (Skin Corr. 1B, H314).

Serious eye damage, Category 1 (Eye Dam. 1, H318).

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

Germ cell mutagenicity, Category 2 (Muta. 2, H341).

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

Specific target organ toxicity (single exposure), Category 1 (STOT SE 1, H370).

Specific target organ toxicity (repeated exposure), Category 2 (STOT RE 2, H373).

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

GHS compliant.

Hazard pictograms:







GHS08

GHS06

GHS05

Signal Word : DANGER

Product identifiers:

CAS 108-95-2 PHENOL

CAS 50-00-0 FORMALDEHYDE 40%

Hazard statements:

H302 + H312 Harmful if swallowed or in contact with skin. H314 Causes severe skin burns and eye damage.

H317	May cause an allergic skin reaction.
1131/	iviay cause an aneigh skill reaction.

H331 Toxic if inhaled.

H341 Suspected of causing genetic defects (if inhaled, if swallowed, in contact with

skin).

H350 May cause cancer.

H370 Causes damage to organs (if inhaled, in contact with skin).

H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements - Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 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:

P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor/... if you feel unwell.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

P304 + P340 IF INHALED: Remove person to fresh air and keep 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.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P333 + P313 If skin irritation or rash occurs: 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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

Identification	Classification GHS	Note	%
CAS: 108-95-2	GHS06, GHS05, GHS08	[i]	25 <= x % < 50
EC: 604-001-00-2	Dgr	[ii]	
REACH: 01-2119471329-32-XXXX	Acute Tox. 3, H301		
	Acute Tox. 3, H311		
PHENOL	Skin Corr. 1B, H314		
	Acute Tox. 3, H331		
	Muta. 2, H341		
	STOT RE 2, H373		
CAS: 90-05-1	GHS07		25 <= x % < 50
EC: 604-031-00-6	Wng		
	Acute Tox. 4, H302		
GAIACOL	Acute Tox. 5, H313		
	Skin Irrit. 2, H315		
	Eye Irrit. 2, H319		

CAS: 50-00-0	GHS06, GHS05, GHS07, GHS08	[i]	10 <= x % < 25
EC: 200-001-8	Dgr	[ii]	
	Acute Tox. 3, H301	[xvii]	
FORMALDEHYDE 40%	Acute Tox. 3, H311		
	Skin Corr. 1B, H314		
	Skin Sens. 1, H317		
	Eye Dam. 1, H318		
	Acute Tox. 2, H330		
	STOT SE 3, H335		
	Muta. 2, H341		
	Carc. 1B, H350		
	STOT SE 1, H370		
INDEX: 607-130-00-2	GHS02	[i]	0 <= x % < 1
CAS: 628-63-7	Wng		
EC: 211-047-3	Flam. Liq. 3, H226		
	EUH066		
PENTYL ACETATE			

Information on ingredients:

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

- [i] Substance for which maximum workplace exposure limits are available.
- [ii] 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.

In the event of splashes or contact with eyes:

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

Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of splashes or contact with skin:

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

If the contaminated aera 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, 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

Irritation, corrosion, cough, breathing difficulties, dizziness, migraine.

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:

- 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)
- gas / irritant vapours
- formaldehyde vapors

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 inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For first aid worker

First aid workers 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

Neutralise with an alkaline decontaminant, such as an aqueous solution of sodium carbonate or similar.

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.

Avoid inhaling vapours.

The persons who have medical histories of cutaneous reactions 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.

Do not inhale vapours.

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

Keep the well closed bottle.

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

Occupational exposure limits:

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
108-95-2	5 ppm			Skin; A4; BEI	
50-00-0			0.3 ppm	SEN; A2	
628-63-7	50 ppm	100 ppm			

- UK :

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
108-95-2	2 ppm	4 ppm		Sk	
	7.8 mg/m3	16 mg/m3			
50-00-0	2 ppm	2 ppm		Carc	
	2.5 mg/m3	2.5 mg/m3			
628-63-7	50 ppm	100 ppm	-	-	-

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.

- Respiratory protection

Avoid inhaling vapors.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

No data available.

Physical state

Physical state: Fluid liquid.

Colour

Colour: Yellow

Odour

Odour threshold: Not stated.

Odour Pungent (presence of formaldehyde)

Melting point

Melting point/melting range: Not relevant.

Freezing point

Freezing point / Freezing range : Not stated. **Boiling point or initial boiling point and boiling range**Boiling point/boiling range : Not relevant.

Flammability

Flammability (solid, gas): Not stated.

Lower and upper explosion limit

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

Flash point

Flash point interval: Not relevant.

Auto-ignition temperature

Self-ignition temperature: Not relevant.

Decomposition temperature

Decomposition point/decomposition range: Not relevant.

pН

pH (aqueous solution):

pH:

Not stated.

3.00 .

Slightly acid

Slightly acidic.

Kinematic viscosity

Viscosity: 5.4

Viscosity: $v < 7 \text{ mm2/s} (40^{\circ}\text{C})$

Solubility

Water solubility: Insoluble. Fat solubility: Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water: Not stated.

Vapour pressure

Vapour pressure (50°C): Not relevant.

Density and/or relative density

Density: 1.075

Relative vapour density

Vapour density: Not stated.

9.2. Other information

No data available.

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

10.5. Incompatible materials

Keep away from:

- acids
- bases
- strong oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)
- gas / irritant vapours
- formaldehyde vapors

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

11.1.1. Substances

a) Acute toxicity:

FORMALDEHYDE 40% (CAS: 50-00-0)

Oral route: LD50 = 243.9 mg/kg body weight

Dermal route: LD50 = 564.85 mg/kg body weight

Inhalation route (Vapours): LC50 = 261 ppm

GAIACOL (CAS: 90-05-1)

Oral route: LD50 = 725 mg/kg body weight

Species: Rat

Dermal route: LD50 = 4600 mg/kg body weight

Species : Rabbit

PHENOL (CAS: 108-95-2)

Oral route: LD50 = 340 mg/kg body weight

Species: Rat

Dermal route: LD50 = 630 mg/kg body weight

Species: Rabbit

b) Skin corrosion/skin irritation:

GAIACOL (CAS: 90-05-1)

Species: Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Species: Rabbit

OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

c) Serious damage to eyes/eye irritation:

No data available.

d) Respiratory or skin sensitisation:

No data available.

e) Germ cell mutagenicity:

No data available.

f) Carcinogenicity:

No data available.

g) Reproductive toxicant:

No data available.

h) Specific target organ systemic toxicity - single exposure :

No data available.

i) Specific target organ systemic toxicity - repeated exposure :

No data available.

i) Aspiration hazard:

No data available.

11.1.2. Mixture

11.1.2.1 Information on hazard classes

a) Acute toxicity:

Oral route: Harmful if swallowed.

Dermal route: Harmful in contact with skin.

Inhalation route (Vapours): Toxic by inhalation.

b) Skin corrosion/skin irritation:

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure between three minutes and one hour.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

c) Serious damage to eyes/eye irritation:

No data available.

d) Respiratory or skin sensitisation:

May cause an allergic reaction by skin contact.

e) Germ cell mutagenicity:

Cause for concern owing to the possibility that it may induce heritable mutations in the germ cells of humans.

f) Carcinogenicity:

Presumed human carcinogen.

g) Reproductive toxicant:

No data available.

h) Specific target organ systemic toxicity - single exposure :

Causes damage to organs.

i) Specific target organ systemic toxicity - repeated exposure :

May cause severe damage to organs in the event of repeated or prolonged exposure.

j) Aspiration hazard:

No data available.

11.1.2.2 Other information

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

CAS 50-00-0: IARC Group 1: The agent is carcinogenic to humans.

CAS 108-95-2: IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.

11.2. Information on other hazards

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.2. Mixtures

No aquatic toxicity data available for the substances.

12.2. Persistence and degradability

12.2.1. Substances

FORMALDEHYDE 40% (CAS: 50-00-0)

Biodegradability:

no degradability data is available, the substance is considered as not degrading quickly.

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. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

The appropriate waste management of the mixture and/or its container must be determined in accordance with local regulations.

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

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2022 [41-22] - ICAO/IATA 2024 [65]).

14.1. UN number

2927

14.2. UN proper shipping name

UN2927=TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S.

(phenol, phenol)

14.3. Transport hazard class(es)

- Classification :





6.1+8

14.4. Packing group

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14.5. Environmental hazards

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14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	6.1	TC1	II	6.1+8	68	100 ml	274	E4	2	D/E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage	Segregation
								Handling	
	6.1	8	II	100 mL	F-A. S-B	274	E4	Category B	-
								SW2	

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	6.1	8	II	653	1 L	660	30 L	A4 A137	E4
	6.1	8	II	Y640	0.5 L	-	-	A4 A137	E4

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Transport in bulk according to Annex II of Marpol 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

The following regulations have been used:

- Globally Harmonized System of Classification and Labelling of Chemicals (GHS), review no. 8 (2019)

Container information:

No data available.

Particular provisions:

No data available.

Substances that deplete the ozone layer (EC Regulation No. 1005/2009, Montreal Protocol):

The mixture does not contain any substance posing a risk to the ozone layer.

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:

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H313	May be harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

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H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H370	Causes damage to organs .
H373	May cause damage to organs through prolonged or repeated exposure .

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.

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

CMR: Carcinogenic, mutagenic or reprotoxic.

STEL: Short-term exposure limit TWA: Time Weighted Averages

TLV: Threshold Limit Value (exposure)

AEV: Average Exposure Value.

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

GHS05: Corrosion

GHS06: Skull and crossbones

GHS08: Health hazard

IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. ICAO: International Civil Aviation Organisation

PBT: Persistent, bioaccumulable and toxic.

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

vPvB: Very persistent, very bioaccumulable.