

SAFETY DATA SHEET

Chlorhexidine 2% in 70% Ethanol (Pink)

Section 1: Identification of substance/mixture and of company/undertaking

1.1 Product Identifier

Chlorhexidine 2% in 70% Ethanol (Pink)

Trade Name:	
Synonyms:	

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

Recommended Uses: Professional skin antiseptic

1.3 Details of the supplier of the safety data sheet

Supplier / Company:	Co-Clens Ltd
Address:	Cod Beck Mill Industrial Estate Dalton Lane Thirsk YO7 3HR
Telephone:	+44 (0) 1845 577117
Email:	enquiries@cbchem.co.uk

1.4 Emergency telephone number

+44 (0) 1845 577117 (24hrs)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to 1272/2008/EC:

Physical Hazards:	Flammable Liquid 2, H225
Health Hazards:	Eye Irritant, H319
Environmental Hazards:	Acute Chronic 3, H412

Most serious harmful effects:

The product is highly flammable

The product may cause eye irritation

The product is harmful to aquatic life with long lasting effect

2.2 Label elements

Labelling according to 1272/2008/EC:

**Signal Word: Danger****Hazard Statements:**

Code	Statement
H225	Highly Flammable Liquid and vapour
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long-lasting effects

Precautionary Statements:

Code	Statement
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed
P305, P351, & P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing
P337 & P313	If eye irritation persists, get medical advice/attention.
P403 & P235	Store in well ventilated place. Keep cool
P501	Dispose of contents/container in accordance with national regulations

Supplementary Label Information: —

Supplementary precautionary statements: —

2.3 Other hazards

None.

Section 3: Composition/information on ingredients

This product is a mixture.

3.2 Mixtures

Name	Identifier type	Numerical identifier	Concentration limits	Classification
Ethanol	CAS EINECS REACH	64-17-5 200-578-6 01-2119457610-43	>67% - <69%	Flammable Liquid 2; H225 Eye irritation 2; H319
Chlorhexidine gluconate	CAS EINECS REACH	18472-51-0 242-354-0 01-2119946568	>1.8% - <2.5%	Eye Damage 1; H318 Aquatic Acute 1 (M-Factor = 1); H400 Aquatic Chronic 1 (M-Factor = 1); H410
Carmoisine Dye	CAS EINECS REACH	3567-69-9 222-657-4 Not available	<0.1%	Not classified

Section 4: First aid measures

4.1 Description of first aid measures

Inhalation:	Remove victim to fresh air and keep at rest position comfortable for breathing
Skin Contact:	In case of skin contact in excess of normal use, wash and remove contaminated clothing
Eye Contact:	Remove contact lenses if present and wash eyes with water. If irritation persists seek medical advice.
Ingestion:	Rinse mouth. Do not induce vomiting. Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation	Disorientation
Eye contact	Irritation
Ingestion	Disorientation and nausea

Information for Health Personnel:	No specific recommendations
--	-----------------------------

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Specific details on antidotes: Not required

Section 5: Firefighting measures

5.1 Extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment: powder, alcohol resistant foam and water spray.
Inappropriate extinguishing media	High pressure water jet
5.2 Special hazards arising from the substance or mixture	Flash back possible over considerable distance. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Decomposition products may include the following materials: carbon oxides, nitrogen oxides (NO _x).
5.3 Advice for firefighters:	Wear self-contained breathing apparatus. Use water spray to cool unopened containers. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Wear full cover eye protection; goggles or face shield, gloves; nitrile, PVC or butyl, a water proof coverall.

6.2 Environmental precautions

Do not discharge into drains or watercourses or onto ground. Contain spillage with inert absorbent material.

6.3 Methods and material for containment and cleaning up

Contain large spillages with booms or dry absorbent material and use absorbent to collect spillage. Transfer to containers for disposal by a licenced waste disposal contractor.

Wash area thoroughly — do not allow washings to enter watercourses or spread onto unmade ground. Very dilute washings may be collected and pumped to containers for disposal or allowed to go to mains sewers. Do not allow washings to enter storm drains.

Small spillages may be collected on absorbent material for disposal in a ventilated container or diluted and washed to sewer.

6.4 Reference to other sections

For personal protection see section 8.

Section 7: Handling and storage

7.1 Precautions for safe handling

Use only with adequate ventilation. Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).

Handle in accordance with good hygiene and safety practice. Remove and wash contaminated clothing before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Keep in a cool, well ventilated place. Keep away from oxidizing agents. Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.

Storage conditions: 0°C to 25°C

7.3 Specific end use(s)

Antiseptic

7.4 Conditions to avoid

High temperatures

Section 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits — Ethanol

Long term exposure limit (WEL) (8hr TWA)	1000ppm / 1920mg/m ³
Short term exposure limit (STEL)	No limits established

8.2 Exposure Controls



Safety signs — wear eye protection where indicated.

Engineering controls:	Not applicable
Respiratory Protection:	Not applicable in normal use. In case of a major spillage wear a respirator fitted with an organic vapour filter cartridge. Check that the respirator fits tightly and the filter is changed regularly.
Hand protection:	For repeat contact wear nitrile gloves
Eye / face protection:	Wear safety glasses or face shield if splashing could occur
Skin protection:	Not applicable.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Pink
Odour:	Alcoholic
pH:	6–8
Relative density:	0.8–0.9
Flash Point:	20°C, closed cup
Flammability Range:	Upper flammable/explosive limit: 19% — Lower flammable/explosive limit: 3.5% (ethanol)
Miscibility with Water:	Fully soluble

9.2 Other information

None

Section 10: Stability and reactivity

10.1 Reactivity	No dangerous reactions under normal storage and use conditions
10.2 Chemical stability	Stable under normal conditions
10.3 Possibility of hazardous reactions	None known
10.4 Conditions to avoid	Heat, flames, sparks
10.5 Incompatible materials	None known
10.6 Hazardous	Oxides of carbon and nitrogen

decomposition products

Section 11: Information on toxicological effects

11.1 General Information

Information on likely routes of exposure: Inhalation, Eye contact, Skin contact.

Inhalation — Acute inhalation toxicity	Ethanol: 4 h LC ₅₀ rat: 117 mg/l
Ingestion — Acute oral toxicity	Ethanol: LD ₅₀ rat: 10,470 mg/kg Chlorhexidine gluconate: LD ₅₀ rat: > 2,000 mg/kg
Skin Contact — Acute dermal toxicity	Ethanol: LD ₅₀ rabbit: > 2,000 mg/kg Chlorhexidine gluconate: LD ₅₀ rat: > 5,000 mg/kg
Skin corrosion/irritation	Result: No skin irritation — 24 h (OECD Test Guideline 404)
Eye Contact — Irritation/Damage	Ethanol, Rabbit — Result: Causes serious eye irritation (OECD Test Guideline 405)
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	No data available
Specific target organ toxicity — single exposure	No data available
Acute inhalation toxicity	Possible symptoms: mucosal irritations
Specific target organ toxicity — repeated exposure	No data available
Aspiration hazard	No data available
Acute and Chronic Health Hazards	Under normal use no effects are expected. Excessive exposure to vapour or ingestion could cause dizziness and narcosis. Direct contact could cause short term eye irritation.
Medical Symptoms (ethanol)	Irritant effects, respiratory paralysis, dizziness, narcosis, inebriation, euphoria, nausea, vomiting
Medical Considerations	Treat symptomatically; remove from exposure

Section 12: Ecological information

12.1 Toxicity

Ethanol

Toxicity to fish	Flow-through test LC ₅₀ — Pimephales promelas (fathead minnow) — 15,300 mg/l — 96 h (US-EPA)
-------------------------	---

Toxicity to daphnia & other aquatic invertebrates	Static test LC ₅₀ — Ceriodaphnia dubia (water flea) — 5,012 mg/l — 48 h (ECHA)
Toxicity to algae	Static test ErC ₅₀ — Chlorella vulgaris (fresh water algae) — 275 mg/l — 72 h (OECD Test Guideline 201)
Toxicity to bacteria	Static test LC ₅₀ — activated sludge — > 1,000 mg/l — 3 h (OECD Test Guideline 209)

Chlorhexidine

Toxicity to fish	LC ₅₀ , 96 hours: 2.08 mg/l (Fish)
Toxicity to daphnia & other aquatic invertebrates	EC ₅₀ — Daphnia magna — 0.087 mg/l — 48 hours
Toxicity to algae	ErC ₅₀ — Green algae — 0.081 mg/l — 72 hours
Toxicity to bacteria	ErC ₅₀ — Activated sludge — 25 mg/l — 3 hours

12.2 Persistence and degradability

Ethanol

Biodegradability, aerobic — exposure time 15 d	ca. 95% — Readily biodegradable (OECD Test Guideline 301E)
Biochemical Oxygen Demand (BOD)	930–1,670 mg/g (Lit.)
Theoretical oxygen demand	2,100 mg/g (Lit.)

Chlorhexidine

Biodegradability, aerobic — exposure time 10 d	>70% — Readily biodegradable
---	------------------------------

12.3 Bio accumulative potential	Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.
12.4 Mobility in soil	No data available
12.5 Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.
12.6 Other adverse effects	None known

Section 13: Disposal considerations

13.1 Waste treatment methods

General Information	Dispose of in accordance with the national regulations on waste and hazardous waste
----------------------------	---

Product: Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Contaminated packaging: Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

European Waste Catalogue: 200113* — solvents

Section 14: Transport information

Land transport (ADR/ADN/RID)

14.1 UN number	1170
14.2 UN proper shipping name	Ethanol Solution
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	No
14.6 Special precautions for user	No

Air transport (IATA)

14.1 UN number	1170
14.2 UN proper shipping name	Ethanol Solution
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	No

Sea transport (IMDG/IMO)

14.1 UN number	1170
14.2 UN proper shipping name	Ethanol Solution
14.3 Transport hazard class(es)	3
14.4 Packing group	II
14.5 Environmental hazards	No
14.6 Special precautions for user	None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable

Section 15: Regulatory information

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

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Workplace exposure limits	UK: EH40/2005 (Third edition; 2018) Ireland: Code of Practice for the Chemical Agents Regulations (2018)

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

Section 16: Other information

Safety Statements:

Code	Statement
H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation
H400	Very toxic to aquatic life.

Abbreviations used in this Safety Data Sheet:

Term	Meaning
IBC code	International code for the construction and equipment of ships carrying dangerous chemicals in bulk
LC ₅₀	Lethal concentration required to kill 50% of test population
LD ₅₀	Lethal dose at which 50% of test population is killed within a certain time
MARPOL	International convention for the prevention of pollution from ships (1973) as modified (1978)
PBT	Persistent, bioaccumulative and toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals (Regulation (EC) No 1907/2006)
UN	United Nations Model Regulations on the Transport of Dangerous Goods
vPvB	Very persistent and very bioaccumulative

Key literature references and sources for data: [European Chemicals Agency, http://echa.europa.eu/](http://echa.europa.eu/)

The mixture should not be used for purposes other than those described in section 1 of this document.

Issued by:	Health & Safety Advisor
Basis of classification:	Regulation (EC) No 1272/2008 (as amended) plus associated guidance
Changes made in this Safety Data Sheet:	None (original version)