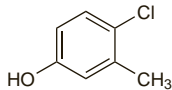


Chlorocresol (USAN, rINN)

Chlorokresol; Chlorokresolum; Chlorocrésol; Chlorocresolum; Chlorokrezolis; Chlorocresol; Kloorikresoli; Klorkresol; Klorokrezol; Parachlorometacresol; PCMC. *p*-Chloro-*m*-cresol; 4-Chloro-3-methylphenol.

Хлорокресол
C₇H₇ClO = 142.6.
CAS — 59-50-7.



Pharmacopoeias. In *Eur.* (see p. vii) and *Int.* Also in *USNF*. **Ph. Eur. 6.2** (Chlorocresol). A white or almost white, crystalline powder or compacted crystalline masses supplied as pellets or colourless or white crystals. M.p. 64° to 67°. Slightly soluble in water; very soluble in alcohol; freely soluble in fatty oils. It dissolves in solutions of alkali hydroxides. Protect from light.

USNF 26 (Chlorocresol). Colourless or practically colourless crystals or crystalline powder with a characteristic nonfatty odour; it is volatile in steam. M.p. 63° to 66°. Soluble 1 in 260 of water; more soluble in hot water; soluble 1 in 0.4 of alcohol; soluble in ether, in terpenes, in fixed oils, and in solutions of alkali hydroxides. Store in airtight containers. Protect from light.

Incompatibility. Chlorocresol has long been recognised to be incompatible with a range of compounds including: calcium chloride, codeine phosphate, diamorphine hydrochloride, papaveretum, quinine hydrochloride,¹ methylcellulose,² and nonionic surfactants^{3,4} such as cetomacrogol 1000 and polysorbate 80.

1. McEwan JS, Macmorran GH. The compatibility of some bactericides. *Pharm J* 1947; **158**: 260-2.
2. Harris WA. The inactivation of cationic antiseptics by bentonite suspensions. *Australas J Pharm* 1961; **42**: 583-8.
3. *PSGB Lab Report P/70/15* 1970.
4. Yousef RT, et al. Effect of some pharmaceutical materials on the bactericidal activities of preservatives. *Can J Pharm Sci* 1973; **8**: 54-6.

Adverse Effects, Treatment, and Precautions

As for Phenol, p.1656. The antimicrobial activity of chlorocresol may be reduced by incompatibility (see above), adsorption, increasing pH, or through combination with organic matter (including oils and fats) or nonionic surfactants.

Chlorocresol is less toxic than phenol. Sensitisation reactions may follow application to the skin and hypersensitivity has occurred after systemic use of injections containing chlorocresol as a preservative.

Uses and Administration

Chlorocresol is a potent chlorinated phenolic disinfectant and antiseptic. It has bactericidal activity against Gram-positive and Gram-negative bacteria and is effective against fungi but has little activity against bacterial spores except at high temperatures. It is more active in acid than in alkaline solution.

Chlorocresol is used in preparations for disinfection of the skin and wounds. It is also used as a preservative in cosmetics and in creams and other preparations for external use that contain water.

Chlorocresol is used as a preservative in aqueous injections issued in multidose containers. It may also be added to aqueous preparations that cannot be sterilised in their final containers and have to be prepared using aseptic precautions. Concentrations of 0.1% have generally been used. Injections prepared with chlorocresol should not be injected into the CSF, the eye, or the heart. Also such injections should generally not be given in volumes greater than 15 mL. Sterilisation by heating with a bactericide such as chlorocresol is no longer a recommended practice.

Preparations

BPC 1973: Proflavine Cream.

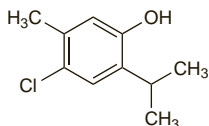
Proprietary Preparations (details are given in Part 3)

Multi-ingredient Arg.: Perfungol†; **Austria:** Ulcunilen; **Chile:** Perfungol; **Cz.:** Cyteal; **Fr.:** Cicatryl; **Fr.:** Cyteal; **Ger.:** Bomix; **Helipur;** Ulcunilen N†; **Gr.:** Lyoderm; **Octrene;** **Irl.:** Anbesol; **Valderma†;** **Ital.:** Helipur; **Hygienist†;** **Port.:** Anbegele†; **Cyteal;** **Rus.:** Cyteal (Цитреал); **S.Afr.:** Anbesol; **Singapore:** Cyteal; **UK:** Anbesol; **Cymex;** **Cyteal;** **Valderma.**

Chlorothymol

Clorotimol; Monochlorothymol. 6-Chlorothymol; 4-Chloro-2-isopropyl-5-methylphenol.

C₁₀H₁₃ClO = 184.7.
CAS — 89-68-9.

**Profile**

Chlorothymol is a chlorinated phenolic antiseptic used as an ingredient of preparations for hand and skin disinfection and topical treatment of fungal infections. It has also been used in preparations for anorectal disorders, cold symptoms, and mouth disorders.

Preparations

Proprietary Preparations (details are given in Part 3)

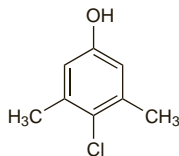
Ital.: Fioral Pasta.

Multi-ingredient Arg.: Solvex Liquido Fungicida†; **India:** Easi Breathe; **Karvol Plus;** **Sinarest** Vapocaps; **Ital.:** Labocaina; **Traumacid†;** **Vagisil;** **Philipp.:** Calmoseptine.

Chloroxylenol (BAN, USAN, rINN)

Chloroxylenol; Chloroxylenolum; Cloroxilenol; Parachlorometaxilenol; PCMX. 4-Chloro-3,5-xyleneol; 4-Chloro-3,5-dimethylphenol.

Хлороксиленол
C₈H₇ClO = 156.6.
CAS — 88-04-0.
ATC — D08AE05.
ATC Vet — QD08AE05.



Pharmacopoeias. In *Br.* and *US*.

BP 2008 (Chloroxylenol). White or cream crystals or crystalline powder with a characteristic odour; volatile in steam. Very slightly soluble in water; freely soluble in alcohol; soluble in ether, in terpenes, in fixed oils, and in solutions of alkali hydroxides.

USP 31 (Chloroxylenol). White crystals or crystalline powder with a characteristic odour; volatile in steam. Very slightly soluble in water; freely soluble in alcohol, in ether, in terpenes, in fixed oils, and in solutions of alkali hydroxides.

Incompatibility. Chloroxylenol has been reported to be incompatible with nonionic surfactants and methylcellulose.

Adverse Effects and Precautions

Chloroxylenol in the recommended dilutions is generally non-irritant but skin sensitivity has occurred. There have been isolated reports of poisoning. Symptoms reported include corrosion of the oral mucosa, larynx, and the gastrointestinal tract, bradycardia, hypotension, and renal failure. Large amounts may cause CNS depression. Pulmonary aspiration of chloroxylenol-based disinfectants may result in pneumonia, acute respiratory distress syndrome, and cardiorespiratory arrest.

The antimicrobial activity of chloroxylenol may be diminished through combination with organic matter. Aqueous solutions of chloroxylenol may be susceptible to contamination with microorganisms. To reduce this risk, solutions must be freshly prepared at the recommended concentration and appropriate measures should be taken to prevent contamination during storage or dilution.

Poisoning. Reports of fatal or severe self-poisoning with chloroxylenol solution.¹⁻⁵

1. Mee D, et al. Fatal self-poisoning with Dettol. *Postgrad Med J* 1977; **53**: 229-31.
2. Joubert P, et al. Severe Dettol (chloroxylenol and terpineol) poisoning. *BMJ* 1978; **1**: 890.
3. Chan TYK, et al. Chemical gastro-oesophagitis, upper gastrointestinal haemorrhage and gastroscopic findings following Dettol poisoning. *Hum Exp Toxicol* 1995; **14**: 18-19.
4. Chan TY, Critchley JA. Pulmonary aspiration following Dettol poisoning: the scope for prevention. *Hum Exp Toxicol* 1996; **15**: 843-6.
5. Joynt GM, et al. Delayed upper airway obstruction: a life-threatening complication of Dettol poisoning. *Anaesthesia* 1997; **52**: 261-3.

Uses and Administration

Chloroxylenol is a chlorinated phenolic antiseptic that is bactericidal against most Gram-positive bacteria but less active against staphylococci and Gram-negative bacteria, and is often inactive against *Pseudomonas* spp. Its activity against *Ps. aeruginosa* appears to be increased by the addition of edetic acid. It is inactive against bacterial spores.

Chloroxylenol Solution (BP 2008) is used for skin and wound disinfection, and chloroxylenol is used as a preservative in a variety of other topical formulations.

Preparations

BP 2008: Chloroxylenol Solution.

Proprietary Preparations (details are given in Part 3)

Arg.: Espado†; **Previnefect†;** **Talowin;** **Austral.:** Dettol Classic; **Belg.:** Dettol; **Canad.:** Antiseptic Ointment†; **Gr.:** Dettol; **Hong Kong:** Dettol; **Irl.:** Det-

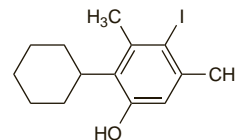
tol; **Ital.:** Neomercuracroma; **Malaysia:** Dettol; **Neth.:** Dettol; **NZ:** Dettol; **Singapore:** Dettol; **Thai.:** Dettol; **UK:** Dettol.

Multi-ingredient Arg.: Jabonacid; Kytinon ATM†; ZeaSorb; **Austral.:** Dettol Cream; Solyptol†; ZeaSorb; **Canad.:** ZeaSorb; **Chile:** Acnaid†; **Derma:** Crema; ZeaSorb†; **Ger.:** Gehwol Fungizid†; **Hong Kong:** Acne-Aid; Dettol†; **India:** Dettol Obstetric; Dettolin; **Indon.:** ZeaSorb; **Irl.:** Dettol; ZeaSorb; **Israel:** Gargol; Hemo; Rexitol; **Ital.:** Foille Scottature; Foille Sole; **Malaysia:** Acne-Aid; Dettol; ZeaSorb†; **NZ:** Dettol; **Philipp.:** Strep-sils; ZeaSorb; **Pol.:** Sterovag; **S.Afr.:** Respispiffers; Woodwards Inhalant; ZeaSorb; **Singapore:** Acne-Aid; Dettol; ZeaSorb; **Thai.:** Dettol; Johnson's Baby Prickly Heat Powder†; ZeaSorb; **UK:** Dettol; Rinstead; Skintex; TCP; Waxwane†; ZeaSorb; **USA:** Calamycin; Cortane-B; Cortic ND; Cyotic; Dermacoat; Foille; Fungi-Nail; Geri-Lav Free; Gordochoin; Lobana Peri-Garde; Mediotic-HC; Otomar-HC; PramOtic; Tri-Otic†; Unguentine Plus; Zoto-HC.

Cicliomenol (rINN)

Ciclioménol; Cicliomenolum. 2-Cyclohexyl-4-iodo-3,5-xyleneol.

Циклиоменол
C₁₄H₁₉IO = 330.2.
CAS — 10572-34-6.

**Profile**

Cicliomenol is an antiseptic included in preparations intended for the topical treatment of mouth and throat infections.

Preparations

Proprietary Preparations (details are given in Part 3)

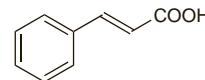
Ital.: Golamed†.

Multi-ingredient Ital.: Golamed Due†; Pastiglie Valda†.

Cinnamic Acid

Cinámico, ácido; Cinnamic Acid. *trans*-3-Phenylpropenoic acid.

C₆H₅CH=CH.CO₂H = 148.2.
CAS — 621-82-9.



Pharmacopoeias. In *Br.*

BP 2008 (Cinnamic Acid). Colourless crystals with a faint balsamic odour. Very slightly soluble in water; freely soluble in alcohol; soluble in chloroform and in ether.

Profile

Cinnamic acid has preservative properties. It is used with benzoic acid and other substances to simulate the flavour of tolu.

Preparations

BP 2008: Tolu-flavour Solution.

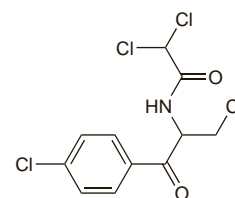
Proprietary Preparations (details are given in Part 3)

Multi-ingredient UK: Hemocane; Potters Gees Linctus; Sanderson's Throat Specific.

Cloponone (BAN, rINN)

Cloponona; Clopononum. (R*S*)-2,2-Dichloro-N-[4-chloro-α-(chloromethyl)phenacyl]acetamide.

Клопонон
C₁₁H₉Cl₄NO₂ = 329.0.
CAS — 15301-50-5.

**Profile**

Cloponone is an antiseptic included in multi-ingredient preparations intended for the topical treatment of vaginal infections.