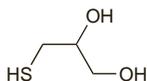


Monothioglycerol

α -Monothioglycerol; Monotioiclerol; Thioglycerol. 3-Mercapto-propane-1,2-diol.
 $C_3H_6O_2S = 108.2$.
 CAS — 96-27-5.

**Pharmacopoeias.** In *USNF*.

USNF 26 (Monothioglycerol). A colourless or pale yellow, viscous, hygroscopic liquid with a slight odour of sulfide. Freely soluble in water; miscible with alcohol; insoluble in ether. A 10% solution in water has a pH of 3.5 to 7.0. Store in airtight containers.

Profile

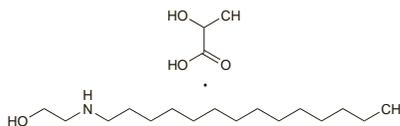
Monothioglycerol is used as an antioxidant preservative in pharmaceutical preparations. It has some antimicrobial activity.

Myralact (BAN, pINN)

Miralactol; Myralactum. (2-Hydroxyethyl)tetradecylammonium lactate.

Миралакт

$C_{19}H_{41}NO_4 = 347.5$.
 CAS — 15518-87-3.

**Profile**

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

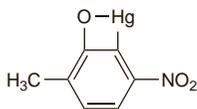
Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Hong Kong:** Ginetris†.

Nitromersol

5-Methyl-2-nitro-7-oxa-8-mercurabicyclo[4.2.0]octa-1,3,5-triene.
 $C_7H_5HgNO_3 = 351.7$.
 CAS — 133-58-4.

**Pharmacopoeias.** In *US*.

USP 31 (Nitromersol). A brownish-yellow to yellow odourless powder or granules. Very slightly soluble in water, in alcohol, in acetone, and in ether; soluble in solutions of alkalis and of ammonia with the formation of salts. Store in airtight containers. Protect from light.

Incompatibility. Nitromersol is incompatible with metals and sulfides. Its antimicrobial activity may be diminished in the presence of organic material.

Adverse Effects and Treatment

As for Mercury, p.2341.

Uses and Administration

Nitromersol is a mercurial antiseptic effective against some bacteria. It is not effective against spores or acid-fast bacteria. It has been used for superficial skin infections and for disinfection of the skin prior to surgical treatment.

Preparations

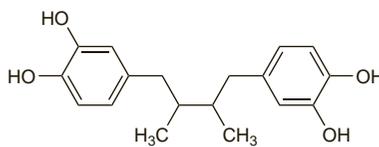
USP 31: Nitromersol Topical Solution.

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **Austral:** Butesin Picrate†; **Chile:** Butesin.

Nordihydroguaiaretic Acid

Acidum Nordihydroguaiareticum; NDGA; Nordihydroguaiarético, ácido; Nordihydroguajareettiha ppo; Nordihydroguajaretsyra. 4,4'-(2,3-Dimethyltetramethylene)bis(benzene-1,2-diol).
 $C_{18}H_{22}O_4 = 302.4$.
 CAS — 500-38-9.

**Profile**

Nordihydroguaiaretic acid has been used as an antioxidant preservative. Allergic contact dermatitis has been reported.

Noxytiolin (BAN, rINN)

Noxytiolina; Noxythiolin; Noxytioline; Noxytiolinum. 1-Hydroxymethyl-3-methyl-2-thiourea.

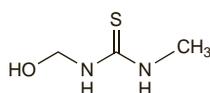
НОКСИТИОЛИН

$C_3H_8N_2OS = 120.2$.

CAS — 15599-39-0.

ATC — B05CA07.

ATC Vet — QB05CA07.

**Adverse Effects and Treatment**

When noxytiolin is given initially by irrigation for the treatment of the purulent infected bladder there may be an intense reaction with a burning sensation and the passage of large fibrin clumps. Giving it with a local anaesthetic such as tetracaine hydrochloride may control the pain.

Breath odour. A pervasive sweet breath odour characteristic of decaying vegetables has been noted in patients treated with peritoneal dialysis fluid containing noxytiolin.¹ The odour was attributed to unidentified sulfur metabolites.

1. Stewart WK, Fleming LW. Use your nose. *Lancet* 1983; i: 426.

Uses and Administration

Noxytiolin is an antiseptic with wide antibacterial and antifungal actions. It may act by slowly releasing formaldehyde in solution.

For instillation into, or irrigation of, the peritoneal cavity or other body cavities, a 1 or 2.5% solution is used. Solutions of noxytiolin should be warmed to 37° before instillation or irrigation. Treatment is usually for 3 to 7 days. The normal total daily amount used in adults should not exceed 5 g for instillation or 10 g for continuous irrigation.

Action. Although noxytiolin has generally been thought to act, at least in part, by slowly releasing formaldehyde into solution, it has been reported¹ that much smaller amounts are released than have previously been thought and that the antimicrobial effects of noxytiolin solutions cannot be attributed solely to the presence of formaldehyde. There is evidence *in vitro* that noxytiolin might reduce the adherence of micro-organisms to epithelial surfaces.²

1. Gorman SP, *et al.* Formaldehyde release from noxythiolin solutions. *Pharm J* 1984; 234: 62-3.

2. Anderson L, *et al.* Clinical implications of the microbial anti-adherence properties of noxythiolin. *J Pharm Pharmacol* 1985; 37 (suppl): 64P.

Infections of the pleural cavity. Three patients with pleural empyema or pneumonectomy space infection were treated by irrigation of the cavity with noxytiolin 1% in normal saline for 3 hours, followed by drainage for 1 hour, the cycle being repeated 4-hourly. Infection was eradicated within 21 days in all 3 patients.¹

1. Rosenfeldt FL, *et al.* Comparison between irrigation and conventional treatment for empyema and pneumonectomy space infection. *Thorax* 1981; 36: 272-7.

Preparations

Proprietary Preparations (details are given in Part 3)

Fr: Noxyflex; **Ir:** Noxyflex S; **UK:** Noxyflex S.

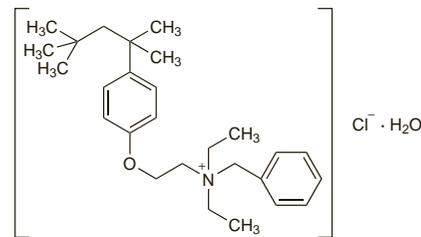
Octafonium Chloride (BAN, rINN)

Cloruro de octafonio; Octafonii Chloridum; Octafonium, Chlorure d'; Octaphonium Chloride; Phenoctide. Benzyl-diethyl-2-[4-(1,1,3,3-tetramethylbutyl)phenoxy]ethylammonium chloride monohydrate.

Октафония Хлорид

$C_{27}H_{42}ClNO \cdot H_2O = 450.1$.

CAS — 15687-40-8 (anhydrous octafonium chloride); 78-05-7 (anhydrous octafonium chloride).

**Profile**

Octafonium chloride is a quaternary ammonium antiseptic with actions and uses similar to those of other cationic surfactants (see Cetrimide, p.1634). It is used in topical preparations for skin disinfection.

Preparations

Proprietary Preparations (details are given in Part 3)

Multi-ingredient: **S.Afr.:** Germolene; **UK:** Germolene.

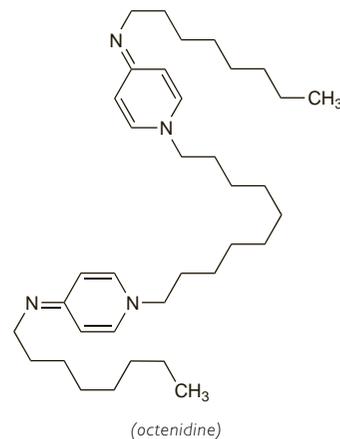
Octenidine Hydrochloride (BANM, USAN, rINN)

Hidrocloruro de octenidina; Octénidine, Chlorhydrate d'; Octenidini Hydrochloridum; Win-41464 (octenidine); Win-41464-2 (octenidine hydrochloride); Win-41464-6 (octenidine saccharin). 1,1',4,4'-Tetrahydro-N,N'-dioctyl-1,1'-decamethylenedi-(4-pyridylideneamine) dihydrochloride.

Октенидина Гидрохлорид

$C_{36}H_{62}N_4 \cdot 2HCl = 623.8$.

CAS — 71251-02-0 (octenidine); 70775-75-6 (octenidine hydrochloride).

**Profile**

Octenidine is a bispyridine bactericidal antiseptic with some antiviral and antifungal activity. It has been used as the hydrochloride for skin and mucous membrane disinfection.

Preparations

Proprietary Preparations (details are given in Part 3)

Fr: Phisomair.

Multi-ingredient: **Austria:** Octeniderm; Octenisept; **Ger.:** Neo Kodan†; Octenisept; **Gr.:** Octeniderm; Octenisept; **Switz.:** Octeniderm; Octenisept.

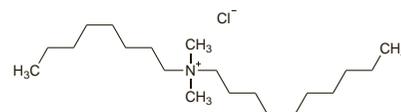
Octyldecyldimethylammonium Chloride

Decyldimethyloctylammonium Chloride; Decyloctyl dimethylammonium Chloride; Octyl Decyl Dimethyl Ammonium Chloride. N,N-Dimethyl-N-octyl-1-decanaminium chloride.

Октилдецилдиметиламоний Хлорид

$C_{30}H_{44}ClN = 334.0$.

CAS — 32426-11-2.

**Profile**

Octyldecyldimethylammonium chloride is a quaternary ammonium disinfectant used in preparations for disinfection of hard surfaces and the skin.