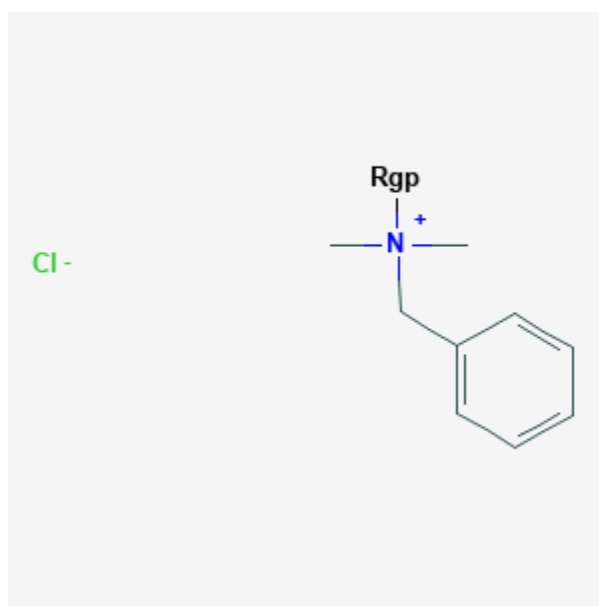




Benzalkonium Chloride

Revised: October 31, 2018.

CASRN: 8001-54-5



Drug Levels and Effects

Summary of Use during Lactation

Topical maternal application of benzalkonium chloride or benzethonium chloride or their presence as a preservative in pharmaceuticals would not be expected to cause any adverse effects in breastfed infants.

Drug Levels

Maternal Levels. Four women using tampons containing benzalkonium chloride 60 mg provided breast milk samples 15 min prior to tampon application and 3 and 24 h after application. Benzalkonium chloride was not detected in the blood or breastmilk in any of the four subjects using HPLC analysis (assay limit not stated).[1]

Infant Levels. Relevant published information was not found as of the revision date.

Effects in Breastfed Infants

A study in Japan randomized 80 consecutive term patients into 4 groups who received either povidone-iodine or benzethonium chloride as a skin disinfectant before delivery and one of these for postpartum vaginal lacerations. Prepartum doses were about 7 mL and postpartum doses were about 0.5 mL of solution. Infant thyrotropin levels were elevated in the infants whose mothers received topical povidone-iodine pre- and postpartum compared to infants whose mothers received benzethonium chloride.[2]

Effects on Lactation and Breastmilk

Relevant published information was not found as of the revision date.

Alternate Drugs to Consider

Chlorhexidine

References

1. Johnson W Jr. Final report on the safety assessment of benzalkonium chloride. J Am Coll Toxicol. 1989;8:589-625.
2. Koga Y, Sano H, Kikukawa Y et al. Affect on neonatal thyroid function of povidone-iodine used on mothers during perinatal period. J Obstet Gynaecol. 1995;21:581-5. PubMed PMID: 8640469.

Substance Identification

Substance Name

Benzalkonium Chloride

CAS Registry Number

8001-54-5

Drug Class

Breast Feeding

Lactation

Anti-Infective Agents, Local

Antibacterial Agents

Detergents

Preservatives, Pharmaceutical