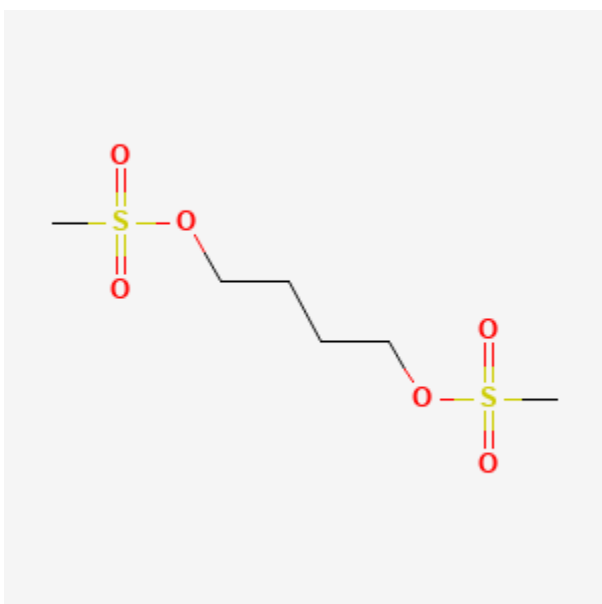




## Busulfan

Revised: August 16, 2021.

CASRN: 55-98-1



## Drug Levels and Effects

### Summary of Use during Lactation

Most sources consider breastfeeding to be contraindicated during maternal antineoplastic drug therapy.[1] It might be possible to breastfeed safely with busulfan during intermittent therapy with an appropriate period of breastfeeding abstinence. Although minimal data are available to determine an appropriate period to withhold breastfeeding, the drug's terminal half-life of 2.5 hours suggests that at least 24 hours may be sufficient. Chemotherapy may adversely affect the normal microbiome and chemical makeup of breastmilk.[2] Women who receive chemotherapy during pregnancy are more likely to have difficulty nursing their infant.[3]

**Disclaimer:** Information presented in this database is not meant as a substitute for professional judgment. You should consult your healthcare provider for breastfeeding advice related to your particular situation. The U.S. government does not warrant or assume any liability or responsibility for the accuracy or completeness of the information on this Site.

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## Drug Levels

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

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

## Effects in Breastfed Infants

Busulfan in a dosage of 4 mg daily for 5 weeks was taken for myeloid leukemia by one woman while breastfeeding. Weekly monitoring found no adverse effects on her infant's leukocyte count or hemoglobin.[4]

## Effects on Lactation and Breastmilk

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

## References

1. Pistilli B, Bellettini G, Giovannetti E, et al. Chemotherapy, targeted agents, antiemetics and growth-factors in human milk: How should we counsel cancer patients about breastfeeding? *Cancer Treat Rev.* 2013;39:207–11. PubMed PMID: 23199900.
2. Urbaniak C, McMillan A, Angelini M, et al. Effect of chemotherapy on the microbiota and metabolome of human milk, a case report. *Microbiome.* 2014;2:24. PubMed PMID: 25061513.
3. Stopenski S, Aslam A, Zhang X, et al. After chemotherapy treatment for maternal cancer during pregnancy, is breastfeeding possible? *Breastfeed Med.* 2017;12:91–7. PubMed PMID: 28170295.
4. Bounameaux Y, Durenne JM. *Ann Soc Belge Med Trop.* 1964;44:381–3. [A case of leukemia in a lactating female: effect of treatment with busulfan on the infant]. PubMed PMID: 14259241.

## Substance Identification

### Substance Name

Busulfan

### CAS Registry Number

55-98-1

### Drug Class

Breast Feeding

Lactation

Antineoplastic Agents

Alkylating Agents