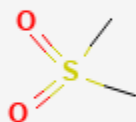




## Dimethyl Sulfone

Revised: March 21, 2022.

CASRN: 67-71-0



## Drug Levels and Effects

### Summary of Use during Lactation

Dimethyl sulfone (methylsulfonylmethane, MSM) is a normal oxidative metabolite found in the bloodstream and breastmilk. It is a metabolic product of endogenous methanethiol metabolism and intestinal bacterial metabolism. No studies have been done on the use of dimethyl sulfone (MSM) orally in nursing mothers, but its low toxicity indicates that it is unlikely to harm the breastfed infant.

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## Drug Levels

*Maternal Levels.* Four human milk samples were obtained from four healthy nursing women (one sample from each mother) at a mean of 80 days postpartum. The amounts of dimethyl sulfone were less in their milk than in infant formulas derived from cow's milk.[1]

In a study of the milk of 429 Finnish mothers, milk levels of dimethyl sulfone ranged from 0.9 to 1.2 mcg/L.[2]

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

## Effects in Breastfed Infants

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

## Effects on Lactation and Breastmilk

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

## References

1. Meoni G, Tenori L, Luchinat C. Nuclear magnetic resonance-based metabolomic comparison of breast milk and organic and traditional formula milk brands for infants and toddlers. *Omics*. 2020;24:424–36. PubMed PMID: 32522087.
2. Kortensniemi M, Slupsky CM, Aatsinki AK, et al. Human milk metabolome is associated with symptoms of maternal psychological distress and milk cortisol. *Food Chem*. 2021;356:129628. PubMed PMID: 33836356.

## Substance Identification

### Substance Name

Dimethyl Sulfone

### CAS Registry Number

67-71-0

### Drug Class

Breast Feeding

Lactation

Anti-Inflammatory Agents