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# Mineral Oil

Revised: December 3, 2018.

CASRN: 8012-95-1; 8020-83-5

## Drug Levels and Effects

### Summary of Use during Lactation

Small amounts of mineral oil can be found in breastmilk, apparently from absorption of hydrocarbons from cosmetics over long periods of time. Because mineral oil is poorly absorbed orally, little or none will not reach the bloodstream of the infant or cause any adverse effects in breastfed infants.[1] One small study supports the lack of effect of maternal mineral oil on the bowels of their breastfed infants. Oral use of mineral oil by the nursing mother is acceptable, although repeated use should be avoided because it may cause a deficiency of fat-soluble vitamins. The use of mineral oil or ointments containing mineral oil on or near the breast may expose the infant to high levels of mineral paraffins via licking.[2] Only water-miscible cream products should be applied to the breast.

### Drug Levels

*Maternal Levels.* In a study of women undergoing cesarean section, subcutaneous fat was removed to analyze it for mineral oil saturated hydrocarbons. Hindmilk was collected from some of the women on days 4 (n = 107) and 20 (n = 71) and also analyzed for these substances. The mean hydrocarbon content of milk fat on day 4 was 55 mg/kg of fat and on day 20 it was 15 mg/kg of fat. The amount in milk fat was correlated with the amount in subcutaneous fat. Based on questionnaires completed by the women, it appeared that the source of the hydrocarbons was accumulation over time from the application of cosmetics, such as sunscreen, hand cream and lipstick.[3][4]

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

### Effects in Breastfed Infants

Fifty mothers who were in the first day postpartum received 15 mL of either mineral oil or Magnolax (equivalent to 3.75 mL of mineral oil and 900 mg of magnesium hydroxide), although the exact number who received each product was not stated. Additional doses were given on subsequent days if needed. None of their breastfed infants were noted to have any markedly abnormal stools, although all of the infants also received supplemental feedings.[5]

## Effects on Lactation and Breastmilk

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

## Alternate Drugs to Consider

(Laxative) Bisacodyl, Magnesium Hydroxide, Senna

## References

1. Hagemann TM. Gastrointestinal medications and breastfeeding. J Hum Lact. 1998;14:259-62. PubMed PMID: 10205441.
2. Noti A, Grob K, Biedermann M eet al. Exposure of babies to C(15)-C(45) mineral paraffins from human milk and breast salves. Regul Toxicol Pharmacol. 2003;38:317-25. PubMed PMID: 14623482.
3. Concin N, Hofstetter G, Plattner B et al. Mineral oil paraffins in human body fat and milk. Food Chem Toxicol. 2008;46:544-52. PubMed PMID: 17923223.
4. Concin N, Hofstetter G, Plattner B et al. Evidence for cosmetics as a source of mineral oil contamination in women. J Womens Health (Larchmt). 2011;20:1713-9. PubMed PMID: 21970597.
5. Baldwin WF. Clinical study of senna administration to nursing mothers.:assessment of effects on infant bowel habits. Can Med Assoc J. 1963;89:566-7. PubMed PMID: 14045350.

# Substance Identification

## Substance Name

Mineral Oil

## CAS Registry Number

8012-95-1; 8020-83-5

## Drug Class

Breast Feeding

Lactation

Emollients

Gastrointestinal Agents

Laxatives