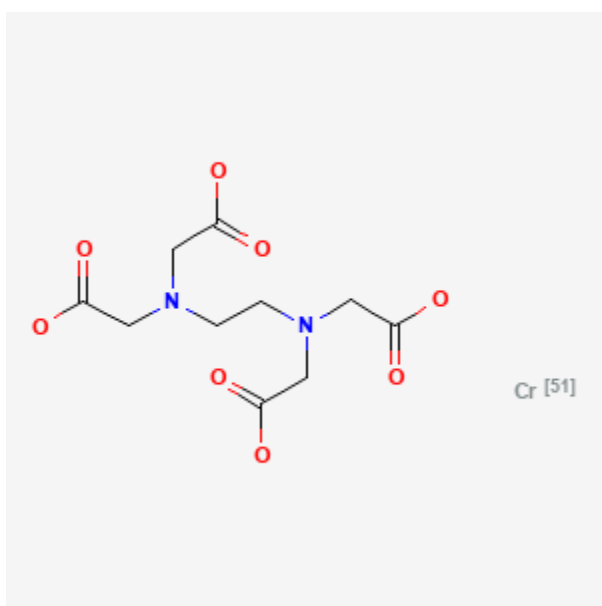




## Chromium Cr 51 Edetate

Revised: October 15, 2023.

CASRN: 27849-89-4



## Drug Levels and Effects

### Summary of Use during Lactation

Information in this record refers to the use of chromium Cr 51 edetate (Cr 51-ethylenediamine tetraacetic acid; Cr 51-EDTA) as a diagnostic agent for the estimation of glomerular filtration rate. The United States Nuclear Regulatory Commission and other international agencies state that breastfeeding need not be interrupted after administration of Cr 51 edetate 60 MBq (1.6 mCi) or less to a nursing mother.[1-3] However, to follow the principle of keeping exposure "as low as reasonably achievable", some experts recommend nursing the infant just before administration of the radiopharmaceutical and interrupting breastfeeding for 2 to 6 hours after the dose, then expressing the milk completely once and discarding it. If the mother has expressed and saved milk prior to the examination, she can feed it to the infant during the period of nursing interruption.[4-6]

**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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Mothers concerned about the level of radioactivity in their milk could ask to have it tested at a nuclear medicine facility at their hospital. When the radioactivity is at a safe level, she may resume breastfeeding. A method for measuring milk radioactivity and determining the time when a mother can safely resume breastfeeding has been published.[7]

## Drug Levels

Cr 51 is a gamma emitter with a principal photon energy of 320 keV and a physical half-life of 27.7 days. The effective half-life of Cr 51 edetate ranges from 5 to 11 hours, depending on kidney function.[4,7] and about 0.065% of an administered dose is excreted into breastmilk.[2]

## 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

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3. Dilsizian V, Metter D, Palestro C, Zanzonico P. Advisory Committee on Medical Uses of Isotopes (ACMUI) Sub-Committee on Nursing Mother Guidelines for the Medical Administration of Radioactive Material. Final report submitted: January 31, 2019. 2019. Available at: <https://www.nrc.gov/docs/ML1903/ML19038A498.pdf>
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## Substance Identification

### Substance Name

Chromium Cr 51 Edetate

### CAS Registry Number

27849-89-4

## **Drug Class**

Breast Feeding

Lactation

Milk, Human

Radiopharmaceuticals

Chromium Radioisotopes

Diagnostic Agents