



Californium

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Recently, police in **Bihar's Gopalganj** seized **50 grams** of the **highly [radioactive metal](#) Californium**, estimated to be worth **Rs 850 crore**.

- **Californium** is a **silvery-white [metal](#)** that tarnishes gradually when exposed to air at room temperature.
- It is so **soft and malleable** that it can be sliced with a razor blade and its **spectral lines** have been detected in [supernova](#).
- **Chemical symbol** of Californium is **Cf** and the **atomic number** is **98**.
- Created in 1950 at Berkeley, it is a **powerful neutron emitter**.
- It is utilized in **portable metal detectors** to identify gold and silver ores, **locate water and oil layers in wells**, and **detect metal fatigue and stress** in airplanes.
- Neutrons from **Californium (Cf-252)** are utilised to serve the **treatment of brain and [cervical cancers](#)** when radiation therapy proves futile.
- Highly radioactive and extremely costly, Californium is priced at approximately **Rs 17 crore per gram** in the international market (one of the most expensive substances in the world).

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