## \* Name Origin:

For Glenn Seaborg, part of the Dubna group that first synthesized this element.

## \* Sources:

Synthetically produced

## \* Uses:

None

## \* Additional Notes:

The discovery of Element 106 took place in 1974 almost simultaneously at the Lawrence-Berkeley Laboratory and at the Joint Institute for Nuclear Research at Dubna (near Moscow). The Berkeley Group, under direction of Ghiorso, used the Super-Heavy Ion Linear Accelerator (Super HILAC) as a source of heavy <sup>18</sup>O ions to bombard a 259mg target of <sup>249</sup>Cf. This resulted in the production and positive identification of <sup>263</sup>Cf, which decayed with a half-life of 0.9 ±0.2 s by the emission of alpha particles as follows:

$$^{263}$$
Sg $\rightarrow \alpha \rightarrow ^{259}$ Rf $\rightarrow \alpha \rightarrow ^{249}$ No $\rightarrow \alpha \rightarrow$ .

The Dubna Team, directed by Flerov and Organessian, produced heavy ions of <sup>54</sup>Cr with their 310-cm heavy-ion cyclotron to bombard <sup>207</sup>Pb and 208Pb and found a product that decayed with a half-life of 7 ms. They assigned <sup>259</sup>Sg to this isotope. It is now thought six isotopes of Element 106 have been identified. Two of the isotopes are believed to have half-lives of about 30 s. In 1997, IUPAC adopted the name seaborgium for Element 106.