

**\* Name Origin:**

After the scientist Dmitri Ivanovitch Mendeleyev, who devised the periodic table.

**\* Sources:**

Made by bombarding einsteinium with helium ions.

**\* Uses:**

None

**\* Additional Notes:**

Mendelevium, the ninth transuranium element of the actinide series to be discovered, was first identified by Ghiorso, Harvey, Choppin, Thompson, and Seaborg early in 1955 as a result of the bombardment of the isotope  $^{253}\text{Es}$  with helium ions in the Berkeley 60-inch cyclotron. The isotope produced was  $^{256}\text{Md}$ , which has a half-life of 78 min. This first identification was notable in that  $^{256}\text{Md}$  was synthesized on a one-atom-at-a-time basis. Sixteen isotopes and isomers are now recognized.  $^{258}\text{Md}$  has a half-life of 51.5 days. This isotope has been produced by the bombardment of an isotope of einsteinium with ions of helium. It now appears possible that eventually enough  $^{258}\text{Md}$  can be made so that some of its physical properties can be determined.  $^{256}\text{Md}$  has been used to elucidate some of the chemical properties of mendelevium in aqueous solution. Experiments seem to show that the element possesses a moderately stable dipositive (II) oxidation state in addition to the tripositive (III) oxidation state, which is characteristic of actinide elements.