

Technetium (Tc)

Atomic number: 43

Atomic mass: 98

Description: The name is derived from the Greek 'tekhnetos' meaning artificial.

Discovered by: Carlo Perrier and Emligo Segre in 1937.

Properties:

Melting point: 2430K

Boiling point: 4535K

Density: 11 g/cm³

State: Solid

Group: 7

Period: 5

Block: d

Electronic Configuration: [Kr] 4d⁵5s²

Isotopes: NA

Appearance: A radioactive, silvery metal that does not occur naturally.

Uses:

- 1) The gamma- ray technetium- 99m (metastable) is widely used for medical diagnostic studies. Several chemical forms are used to image different parts of body.
- 2) It is a remarkable corrosion for steel, and adding very small amounts can provide excellent protection. This use is limited to closed systems as technetium is radioactive.

Source: www.rsc.org

