

The polonium in the product is contained as a metal foil. The basic foil construction is shown below. Precious metals lock polonium into a solid foil with superior physical properties. The use of gold in the metallic medium imparts excellent resistance to corrosion and oxidation. A patented encapsulation process incorporated polonium into the matrix using a pressure welded-metallurgy technique. The result is a foil that is insoluble and inert in most chemicals. For added protection, the foil is covered by a metal grid to prevent accidental damage to the polonium source.

The alpha particle emitted by polonium has a maximum range of 1-1/2 inches in air and practically no penetrating power. The penetrating range is 40 microns in tissue. The epidermis, or outer layer of dead skin, on the human body is 250-300 microns thick. The alpha particle cannot get past the dead layer of skin.

Due to the radioactive decay, the Staticmaster becomes ineffective to remove static after two years. The recommended replacement is every 12 to 18 months, depending on your application. Old (decayed) units should be returned to NRD for proper disposal.

