

# RADIOACTIVITY STATEMENT



SPI Supplies  
206 Garfield Avenue,  
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## SPI-Chem™ Uranyl Compounds and Depleted Uranium

**Be sure you understand the products you are using!**

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### **Introduction to depleted uranium:**

Naturally occurring radioactivity in certain of the "radioactive" elements can pose a substantial health risk to laboratory workers using such materials in their laboratories.

Hence, SPI Supplies offers uranyl compounds manufactured only from such uranium that is described as "depleted" uranium, that is, uranium from which the radioactive isotopes have been substantially reduced. The key word here is "substantially", which does not mean "completely". This means that there is a very low level of residual radioactivity in any compounds made from depleted uranium. The level is so low, however, that it is generally considered "safe" for the people working in the laboratory, and using it in laboratory quantities.

The origins of the world's supply of "depleted" uranium is a by-product of the nuclear enrichment programs of several different countries and since everyone has the need to enrich to the same degree, the by-products have been depleted to the same degree as well. Hence, whether the uranyl compounds come from SPI Supplies or some other vendor, the point is, everyone has in their product depleted uranium that has been depleted to more or less the same amount.

We are often asked about the isotope ratios of SPI-Chem uranyl compounds. SPI Supplies has no control over the isotope ratio of depleted uranium. The isotope ratio may vary not only from batch to batch but even within a single batch. We are not able to provide information on the isotope ratio of the uranium. We are able to state that on average, one gram of SPI-Chem depleted uranium has an activity of approximately 0.3 microCuries. The approximate activity level of any quantity of SPI-Chem uranyl compounds may be calculated from this information.

The one thing you want to watch out for is this: Until about 1960, chemical manufacturers and suppliers did not worry about depleted uranium. They supplied the uranyl compounds with naturally occurring uranium which had higher levels of the radioactive isotopes. One can usually tell these old bottles from more recent ones by their old labels, often times carrying the names of suppliers long having since gone out of business (or were merged into other firms).

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**EER**