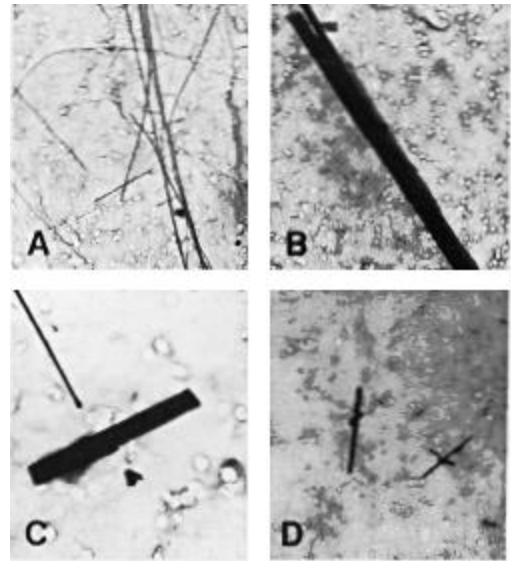


# UICC ASBESTOS STANDARDS PRODUCT INFORMATION

## SPI Supplies UICC Asbestos Standards

These [standard reference asbestos](#) Union Internationale Centre le Cancer (UICC) samples are available packaged in 0.1g and 1.0g vials. This may not sound like much but it is a considerable amount, and for most users, it is a lifetime supply. These standard samples were originally developed specifically for calibration, testing, or reference specification for comparison with unknown materials. They can be considered knowns for SAED, EDS, XRD, and for morphological standards for TEM and SEM and sometimes even for LM. However we are unable to issue a Certificate of Conformity for these unique standard samples. SPI Supplies is the exclusive worldwide distributor for these five, one-of-a-kind standard asbestos samples.



### Asbestos Reference Samples

The UICC reference samples were developed a number of years ago, as part of a world-wide research effort and in a very different quality climate. Basically, what was done was to obtain a relatively large amount of material, homogenize it, characterize it and distribute it to a number of end users, manufacturers and sub-distributors. A great deal of analytical data was indeed developed on them for a variety of purposes, and various results were published in a number of different scientific journals and trade publications. In so far as we have been able to determine, there was never a master compilation of this data, and it has to be obtained by going to the different publications. The trace element compositions of the UICC standard asbestos samples are reported in American Journal of Industrial Medicine Volume 32, Issue 6, Pages 592 - 594, Published Online: 6 Dec 1998.

The five samples are described as follows:

#### [Chrysotile "B" Canadian](#)

NB #4173-111-1

This sample consists of a mixture of fiber from the firms Bells, Carey, Cassair, Flintkote, Johns-Manville, Lake, Normandie and National, proportioned roughly to represent Canadian production of asbestos products at that time. All starting materials were Grade 4 on the Canadian scale or the nearest equivalent, the goal being to obtain material of relatively short fiber length but with a minimum of "rock". For further information, see Timbrell, Gilson and Webster, *Int. J. Cancer* **3**, 406-408 (1968). This mineral is predominantly made up of hydrous silicates of magnesia.

### Chrysotile "A" Rhodesian

NB #4173-111-2

The origin of this sample was the asbestos mine located in Zvishavane (Shabani; Shavani), Matabeleland South, Zimbabwe. This mineral is predominantly made up of hydrous silicates of magnesia.

### Crocidolite South African

NB #4173-111-3

The origin of this sample was the Koegas mine which was the largest asbestos mine in the Northern Cape of South Africa. This mineral is predominantly made up of hydroxy silicates of Na, Mg, and Fe.

### Amosite South African

NB #4173-111-4

The origin of this sample was the Penge mine in Northern Province, South Africa. It exhibits a lamellar, coarse to fine structure, which is fibrous and asbestiform. It consists of hydroxy silicate of Fe and Mg.

### Anthophyllite Finnish

NB #4173-111-5

The origin of this sample was the Paakilla mine in Finland. This type of asbestos only rarely found in construction materials. The fibers seem to be extremely flat and thin with a characteristic shape that resembles that of a knife blade, coming to a point at one end.

## **No Certificate of Conformity**

These materials were intended for use in research programs in a time when questions of certification simply did not arise; scientists shared materials with each other, acknowledged the source and went on with their work.

The result is that SPI Supplies, which obtained some of the original material and has been offering it to our customers for many years, has no basis on which to certify the material; the source documents simply do not exist. We can tell our customers that we are indeed providing the original material, but we cannot provide a customer with a document that will be of assistance in meeting the requirements of a quality system.

Most quality systems allow for the use of the fundamental properties of matter, rather than traceability, as the basis for using a reference sample. Clearly the material we provide is what we describe it to be, and any competent asbestos analyst can verify this. It has the considerable benefit of having been homogenized so that a very small amount can be used for any test, without concern that the portion used might not be representative of the material as a whole, but it simply does not have the documentation that a rigorous assessor would require under an ISO 9000-type quality system.

- EER 6-20