



VERMICULITE IS NOT ASBESTOS

A summary of the review of the mineralogy of vermiculite and its fundamental differences to asbestos completed by John Addison of Addison-Lynch in Edinburgh, February 1994.

What is the difference between Vermiculite and Asbestos?

Vermiculite

- Sheet silicate mineral
- Very few health effects based on animal testing
- Does not stay in lungs long enough for damage

Asbestos

- Fibrous silicate mineral
- Testing has revealed the dusts to be carcinogenic
- May remain in lungs for a lifetime

Fibers of vermiculite **can** be formed by breakage of the flakes or by curling of the edges of the flakes

BUT

The fibrous shape alone does not constitute asbestos **or** mean that vermiculite will behave like asbestos.

Why is Vermiculite associated with Asbestos?

- Vermiculite ores contain a range of other minerals that were formed alongside the vermiculite in the rock, the majority of which are not carcinogenic in their dust forms
- Public concern was generated when vermiculite deposits such as those in Montana were found to have more than trace amount of asbestos

No asbestos related diseases have been found among the workers in any vermiculite deposits except those in Montana where the asbestos exposure was known to be high.

These deposits have since been **closed**.

What precautions are being taken in the vermiculite industry to prevent asbestos-related incidents?

- Vermiculite producers, manufacturers, and suppliers are required to provide health and safety data sheets identifying and labeling materials containing asbestos or other carcinogens
- Techniques using microscopy are used to identify and quantify asbestos in mined raw materials
- Legislation exists today ensuring that **all** asbestos types are less than or equal to 0.1% of any mined bulk material

Much of the vermiculite industry adheres to a standard of **0.01% or less** of the bulk raw material containing asbestos.