

## Asbestos in educational mineral sample kits and stones sold separately

### Purpose

This safety alert provides information about the potential presence of asbestos in rock and mineral samples that are contained in some mineral sample kits and specimens also sold individually. These items have been purchased by schools or private individuals throughout Australia and continue to be available for sale online.

### Background

Some mineral sample kits have been found to contain rocks with naturally occurring asbestos (NOA) under a variety of names, including serpentine, amosite, tremolite and chrysotile (occasionally referred to by the name of leucotile). Some older kits (dating from the 1970s) produced by the former Geological Specimen Supplies company may also contain asbestos. The 'Lustre' mineral sample kits may include crocidolite (blue) asbestos as an example of fibrous lustre.

Only scientific testing of a sample can confirm the presence of asbestos. Individual rocks and stones that are sold separately may also contain asbestos. Descriptions such as 'Serpentine Stone' are a risk for containing asbestos.

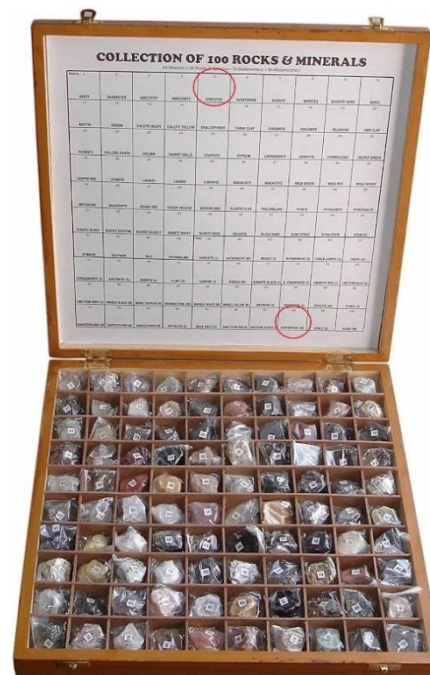
Kits and individual stones which contain any of the sample descriptions listed in Table 1 (next page) that have been purchased, should be treated as containing asbestos, withdrawn from use and disposed of safely.

### Product description

Generally, a box with separated sections containing individual specimens of rocks and minerals. Kits of risk include those of older Australian origin (prior to 2011) and some imported kits.



**Figure 1:** Older mineral kit containing samples of serpentine and leucotile



**Figure 2:** Online mineral sample kit containing samples of asbestos and serpentine

## Asbestos in imported products

While asbestos has been prohibited in Australia since December 2003, in some countries it is still able to be used and sold or low levels of asbestos classified as 'asbestos-free'. A trace level of asbestos in goods does not alter the fact that asbestos is present. The unlawful importation, supply and sale of goods containing asbestos, which includes NOA in rocks and minerals, is prohibited in Australia.

The import prohibition is enforced by the Australian Border Force based on whether asbestos is found to be unlawfully present in goods, not on the perceived direct risk to the end-user.

### Risk control

- Individual specimens, or kits containing the geological samples listed in Table 1, should be treated as containing asbestos and not be purchased.
- Individual specimens, or kits containing the geological samples listed in Table 2, should be treated as potentially containing asbestos and confirmation sought from the supplier.
- A pre-purchase check should be undertaken for all mineral, geological and ore kits or samples such as those listed in Table 3.

**Table 1:** Mineral descriptions used by suppliers that are not to be purchased.

Prohibited Asbestos Minerals	Mineral Group
Chrysotile (white asbestos) (formerly also known as Leucotile)	Serpentine
Anthophyllite	Amphibole
Crocidolite (Blue asbestos)	
Amosite (grunerite) (brown asbestos)	
Actinolite	
Tremolite	

**Table 2:** Mineral descriptions that may be of risk for asbestos content – obtain written confirmation of no asbestos content from supplier

Mineral rock or type	Comment
Serpentine, serpentinite or 'serpentine rock'	Not all contain asbestos. Some serpentinite rocks may have asbestos veins throughout. Specimens marketed as 'healing stones'. Lizardite and antigorite serpentines may occur in rocks with chrysotile asbestos.
Amphibole	Amphiboles are a mineral group, but sometimes incorrectly used as a mineral name. Most amphiboles, such as hornblende, are not asbestos minerals, are very common in a variety of rock types around Australia and are critical in understanding and teaching the geological processes.
Riebeckite	Occurs in banded iron formations as the asbestiform variety crocidolite.
Winchite	Can be asbestiform in association with tremolite asbestos.
Fibrous zeolites	Erionite and offretite.
Richterite	Can be asbestiform in association with tremolite asbestos.

**Table 3:** Mineral, geological and ore kits that could contain asbestos and warrant a pre-purchase check

Igneous, metamorphic and sedimentary rock and mineral kits	Fluorescence and phosphorescence kits
Crystal habit kits	Streak kits
Lustre kits	Specific gravity kits
(Moh's) Hardness kits	Individual geological specimens
Cleavage kits	

- When purchasing mineral sample kits, obtain a list of the samples in the kit and confirm the country of origin before going ahead with the purchase. Where the kits are assembled may not be where they are delivered from.
- Obtain the supplier's written confirmation that there are no asbestos minerals in the kit, before purchasing.

- Mineral sample kits that are professionally assembled in Australia are more likely to not contain asbestos. Sources such as reputable Australian educational materials suppliers or a geological society are likely to be more reliable than a 'healing stone' supplier or online shopping platform which stocks multiple different commodities.
- Some online purchases from sellers said to be based in Australia may result in an importation from an overseas supplier sent directly to the purchaser. The seller may merely arrange for the supply and not sight the goods. The buyer is then the importer.

### Action required if in possession of a mineral sample kit or other specimens

- Compare labelling in comparison to tables above to establish whether any suspect samples are present.
- Identified suspect samples should not be handled. The entire kit should be appropriately disposed of. Schools should undertake handling and disposal in line with guidance from the relevant education department's work, health and safety guidelines for asbestos.
- If a consumer wishes to dispose of items they believe may contain asbestos, they should take it to a licensed facility that handles hazardous waste. Further information on the disposal of asbestos waste may be obtained from local government authorities, the relevant environmental protection authority or waste disposal authority in your state or territory. See page 3.

### Mineral Talc

Mineral talc and asbestos minerals can sometimes geologically occur together, as it can with other minerals. An appropriately sourced and assembled kit from a reputable supplier should not contain asbestos contaminated talc samples. The risk of asbestos contamination from this source is assessed as very low.

### Where do I get advice?

If unsure what to do, contact your State/Territory/Commonwealth WHS regulator:

Jurisdiction	Regulator	Contact Details	Website
ACT	WorkSafe ACT	13 22 81	<a href="http://www.worksafe.act.gov.au">www.worksafe.act.gov.au</a>
Cth	Comcare	1300 366 979	<a href="http://www.comcare.gov.au/">www.comcare.gov.au/</a>
NSW	SafeWork NSW	13 10 50	<a href="http://www.safework.nsw.gov.au">www.safework.nsw.gov.au</a>
NSW	NSW Gov Asbestos page	13 10 50	<a href="http://www.asbestos.nsw.gov.au">www.asbestos.nsw.gov.au</a>
Qld	Workplace Health and Safety Qld	1300 362 128	<a href="http://www.worksafe.qld.gov.au">www.worksafe.qld.gov.au</a>
Qld	Qld Gov Asbestos page	13 74 68	<a href="http://www.asbestos.qld.gov.au">www.asbestos.qld.gov.au</a>
NT	NT WorkSafe	1800 019 115	<a href="http://www.worksafe.nt.gov.au">www.worksafe.nt.gov.au</a>
NT	NT Gov Asbestos page	1800 019 115	<a href="http://www.asbestos.nt.gov.au">www.asbestos.nt.gov.au</a>
NZ	WorkSafe NZ	+64 0800 030 040	<a href="http://www.worksafe.govt.nz">www.worksafe.govt.nz</a>
SA	SafeWork SA	1300 365 255	<a href="http://www.safework.sa.gov.au">www.safework.sa.gov.au</a>
SA	SA Gov Asbestos page	1300 365 255	<a href="http://www.asbestos.sa.gov.au">www.asbestos.sa.gov.au</a>
TAS	WorkSafe TAS	1300 366 322	<a href="http://www.worksafe.tas.gov.au">www.worksafe.tas.gov.au</a>
Vic	WorkSafe VIC	1800 136 089	<a href="http://www.worksafe.vic.gov.au">www.worksafe.vic.gov.au</a>
Vic	Vic Gov Asbestos page	1800 136 089	<a href="http://www.asbestos.vic.gov.au">www.asbestos.vic.gov.au</a>
WA	WorkSafe WA	1300 307 877	<a href="http://www.commerce.wa.gov.au/WorkSafe">www.commerce.wa.gov.au/WorkSafe</a>

This Alert has been developed by the Heads of Workplace Safety Authorities (HWSA) Imported Materials with Asbestos Working Group (IMAWG), whose membership comprises representatives from: SafeWork NSW, SafeWork SA, NT WorkSafe, Workplace Health and Safety Queensland, WorkSafe ACT, WorkSafe Tasmania, WorkSafe Victoria, WorkSafe WA, Australian Border Force, Asbestos Safety and Eradication Agency, Australian Government Department of Employment and Workplace Relations, Australian Competition & Consumer Commission, Comcare, and Safe Work Australia. Technical input courtesy of the Geological Society of Australia (Qld).