

Mineral Spotlight: Talc

This week's mineral is talc. Well-known and loved by introductory Geology students for its easily-identifiable low hardness, talc occurs as a low-grade metamorphic mineral. The lines across the surface of this talc come from the metamorphic stress that created it.

Talc usually occurs with olivine, serpentine, and tremolite in metamorphosed mafic rocks, because of their high magnesium content (talc's formula is $Mg_3Si_4O_{10}(OH)_2$). These associated minerals are what gives talc its reputation as potentially health hazardous – many of them are considered asbestos minerals. Talc's close association with asbestos minerals means in talc products, it is not uncommon to find amounts of asbestos contamination, making them potentially carcinogenic. This possibility is still being studied by numerous agencies.

Talc is used in all kinds of products, from cosmetics to ceramics, toilets, roofing, paper, plastic, and rubber. Some of these uses (mostly cosmetic) are being re-evaluated based on ongoing research.

This feature was posted on Dice Museum social media by Museum curator Jillian Herlinger on 7/26/2022.

