

Crayon firms agree to stop using talc

Agency's tests find fibers; little risk is seen

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The federal government has asked crayon manufacturers to remove talc from their products because its tests found asbestos and other potentially dangerous fibers in crayons.

The [Consumer Product Safety Commission](#) said yesterday that the nation's top three crayon makers will comply with the agency's request.

The agency said its findings, to be announced officially today, indicate that even though trace amounts of cancer-causing asbestos were found in the talc used to strengthen the crayons, harmful exposure to children is unlikely because the fibers are embedded in the crayons' wax ([see graphic](#)).

"Under the laws the commission works under, we cannot order crayons containing these fibers off the market because we haven't documented a danger to children," said Ronald Medford, assistant executive director of hazards identification at CPSC.

"But these fibers should not be in products used by kids so we have asked the manufacturers to voluntarily reformulate their crayons using substitute ingredients."

The agency's studies were done in response to stories published last month in the Seattle Post-Intelligencer. The newspaper had two government-certified laboratories analyze eight brands of crayons, four domestic and four manufactured overseas. Analysis of the three leading brands -- Crayola, Prang and Rose Art -- repeatedly showed the crayons contained asbestos.

Of the 40 crayons tested from the brands that had asbestos, 32 were contaminated above the trace level.

Yesterday, CPSC said that Crayola, Prang and Rose Art had agreed to remove the talc from its crayons within a year. Rose Art said last week that it had removed talc from the majority of its products 15 months ago.

"We will be contacting the other, smaller companies, and letting them know what we found. We have every reason to believe that they too will be willing to remove the talc from their crayons," Medford said.

The three manufacturers and the Arts and Creative Materials Institute, which issues the non-toxic labels for almost 100 American crayon makers, had insisted that there was no asbestos in the crayons.



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Dr. Jerrold Abraham, a New York expert, has long sought government recognition of cancer-causing agents often found in mined talc.

But they acknowledged they never tested for asbestos and relied on assurances of asbestos-free talc from the R.T. Vanderbilt Co., whose mines, according to the institute, supply talc for most of the crayons produced in the U.S.

After the P-I's tests, Crayola had two of its crayons tested by materials analyst Richard Lee, who pronounced the crayons asbestos-free. The P-I subsequently reported that Lee had testified more than 250 times in civil trials on behalf of the asbestos industry, which had paid him \$7 million.

Lee, who had also worked with Vanderbilt, said his close association with the industry had no bearing on his test results.

The P-I tested the crayons as part of its continuing examination of how asbestos is regulated and monitored by the government. Most Americans believe that asbestos has been banned in consumer products, but the EPA's attempt at a ban was overturned in 1991 after a court challenge by the industry.

Low levels of asbestos found

CPSC had two labs -- Data Chem in Cincinnati and the Occupational Safety and Health lab in Salt Lake City -- analyze the crayons, which included atomic tangerine, pine green, orchid, blue and wild strawberry from Crayola; yellow, light yellow, periwinkle and carnation red from Prange; and monster mango from Rose Art.

The scientists found extremely low levels of anthophyllite asbestos and cleavage fragments of tremolite in some of the crayons.

"We're considering the asbestos scientifically insignificant when we compare it to the much larger amount of anthophyllite-like fibers we also found in the crayons," Medford said.

These "transitional fibers" identified by CPSC's labs -- magnesio-anthophyllite -- are not one of the six forms of asbestos regulated by the government, so CPSC is once again caught up in the asbestos name game that has plagued it and other government agencies for nearly 30 years.

"Semantics. That's what this fiber issue is coming down to," Medford says.

"It is extremely difficult to distinguish between true anthophyllite asbestos, which the government regulates as a carcinogen, and the anthophyllite with magnesium that has been found in the talc," he said. "They're almost identical in structure. They have long, thin fibers. They're durable. They are very hard to distinguish from asbestos and therefore, we think they shouldn't be in crayons."

Medford says that many people believe the fibers present risks similar to those posed by regulated asbestos.

"Some people might argue about what the potency might be, but many medical experts believe there is a health risk. That's why crayon makers should use a different material."

But even if the higher concentrations of non-regulated fibers CPSC's scientists found are cancer-causing, the agency said they present no risk to children, and they did a coloring experiment to prove it.

The agency's lab director colored "vigorously" for 30 minutes in a air tight glove-box while constantly taking samples of the air within.

"We didn't find any airborne particles from that experiment," Medford said.

The agency also said it saw no hazard from ingestion, the eating of crayons.

Many scientists, tiring of the decades-long debate, want the hazardous but non-regulated fibers addressed by the government.

"The issue has got to be resolved," Medford said. "The National Toxicology Program has been asked by National Institute of Occupational Safety and Health to list these talc fibers as carcinogens. This may help end the confusion."

The CPSC concluded that there is no cause for concern, a commission statement said. Parents and teachers can continue to use the crayons they have and purchase crayons from the shelves.

A new look at play sand

The CPSC said yesterday that its crayon findings have spurred the agency to take a new look at an old controversy--fibers in children's play sand.

In 1986, Mark Germino, then a medical student in New Jersey, and Dr. Jerry Abraham, professor of pathology at New York's Upstate Medical University in Syracuse, discovered asbestos in play sand.

Concerned that children playing in the dusty sand would inhale asbestos fibers, doctors fought for more than two years to get CPSC to remove sand containing asbestos from the market. But industry prevailed, insisting to the commission that the type of fibers found in the play sand -- which are the same type now found in crayons -- did not qualify as asbestos and did not cause disease.

"They're playing a name game," said Dr. Sidney Wolfe, head of the Health Research Group of Public Citizen, which first petitioned CPSC to get products with asbestos-containing talc off the market in 1977.

CPSC finally issued a report saying there was no asbestos in play sand.

"All the other products they regulate that they know contain, or suspect might contain asbestos-contaminated talc, they should also be acting on," said Wolfe. "A lot of other products are long overdue for this."

Yesterday, the CPSC said it is reopening its examination of play sand "based on the new information we have uncovered in the crayon investigation."

The play-sand battle was one more skirmish in a nearly 30-year-effort to prevent the fibers found in talc from being regulated as asbestos.

Fearful that OSHA asbestos standards would cause its customers to switch to talc substitutes, Vanderbilt fought for years to get the fibers in its talc exempted from regulation even as federal studies documented increased lung disease in Vanderbilt's miners.

After countless hearings, and with the help of members of Congress, Vanderbilt finally prevailed. In 1994, OSHA issued a final asbestos standard that ensured that Vanderbilts talc would be free of regulation.

The name game, again

Although the fiber terminology is confusing, the effects of the fibers on the human body are straightforward, said doctors.

Abraham says he doesn't believe the finished crayon product is an imminent hazard. "I do think that the fact it has been manufactured with a filler known for decades to be resulting in disease and death in the miners and millers shows the need for better regulatory action."

Dr. Philip Landrigan, director of the Center for Children's Health and the Environment at Mount Sinai School of Medicine, said he was concerned that some fibers could be released by children coloring.

"The asbestos industry has used that argument for years: that asbestos in linoleum and roof shingles is harmless as long as it stays in the matrix. But as soon as you cut it, it's released."

"Similarly," he added, "the assertion that crayons can't release fibers breaks down as soon as the crayons do."

Vanderbilt, the producers of talc for most crayon companies, continues to insist that its talc is free of asbestos.

"The composition of the talc has in the past been incorrectly characterized, but the absence of asbestos has been repeatedly confirmed by mineral scientists in academia, analytical laboratories, and by the relevant regulatory agencies," says a statement on Vanderbilt's Web site.

However, the government's most "relevant regulatory agency," when it comes to evaluating the risk of ore to miners is the Mine Safety and Health Administration. And MSHA's most recent testing of Vanderbilt talc, on Feb. 16, found asbestos in all four samples analyzed.

"The samples contained asbestos ranging from 20 percent to 50 percent," says Davitt McAteer, the assistant labor secretary who heads the mine safety agency.

The crayon makers reacted with almost a single voice -- all saying their crayons are safe, but that they would comply with CPSCs request to remove talc so there would be no confusion among consumers.

Larry Rosen, the president of New Jersey-based Rose Art, the nation's second-largest crayon maker, stopped using talc in its crayons 15 months ago. But, he told CPSC that a small number of crayons that Rose Art makes in Malaysia will be reformulated to remove the talc.

Neither Debbie Fanning, the institute's executive director nor the ACMI's toxicologist, Dr. Woodhall Stopford returned calls yesterday.
