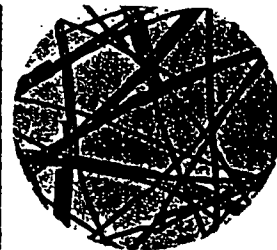


Photomicrograph of
Union Carbide's High-
purity asbestos fiber



ASBESTOS

PRODUCT INFORMATION



UNION CARBIDE CORPORATION • MINING AND METALS DIVISION • 270 PARK AVENUE, NEW YORK, N.Y. 10017

A THREE-MINUTE STORY ON UNION CARBIDE ASBESTOS

High purity, non-abrasive, high brightness -- these unusual properties make Union Carbide asbestos different from all other asbestos products. The reason for the difference is that Union Carbide asbestos comes from an unusual high-grade ore deposit that is essentially free of hard, consolidated rock masses. A patented wet process then breaks down the fiber bundles and removes the rock and other foreign material, leaving a product that is essentially pure asbestos. When added to paper, this product offers many money-saving advantages, including improved furnished retention, saveall efficiency, optical efficiency, pitch control, and softness.

A positive surface charge is responsible for the improved retention obtained from Union Carbide asbestos in paper. Asbestos, with a Zeta potential of +40 millivolts, attracts TiO_2 and cellulose whose Zeta potential is -2 and -13 millivolts respectively. (These charges occur at a pH of 6.) This strong opposite charge reduces the loss of solids to the tray water.

Thousands of tiny fibrils are contained in every pellet of Union Carbide asbestos. Each fibril is only a few microns in length and has a length-to-diameter ratio of between 200 and 300 to one. These fibrils are so tiny that if all the fibrils in 1 gram of asbestos were put end to end, they would circle the earth at the equator 40 times. The large surface area provided by these fibrils helps the asbestos improve retention and pitch control.

An abrasion test has been made to measure the relative abrasiveness of Union Carbide asbestos and bleached sulfite paper stock. Wet-processed asbestos was found to be less abrasive than pulp, indicating minimum wear on fourdrinier wires, trimming knives, printing plates, etc.

Asbestos is a group of minerals. Union Carbide asbestos is a chrysotile asbestos, the most abundantly produced of 6 species of asbestos found in the world. Its formula, in case anyone is interested, is $Mg_6(OH)_8Si_4O_{10}$.

One of the world's largest asbestos deposits is the source of Union Carbide's high-purity asbestos product. Located near King City, Calif., about 150 miles south of San Francisco, this deposit has millions of tons of known reserves, assuring users of a continuing supply.

For more information about this unusual asbestos, write or phone one of these offices:

270 Park Ave., New York, N. Y.	212-LL1-4420
1371 Peachtree St. N. E., Atlanta, Ga.	404-876-3331
6855 W. 65th St., Chicago, Ill.	312-581-5000
22 Battery St., San Francisco, Calif.	415-982-1360

