



162162



G00002

ABSTRACT

The present invention relates to polybenzazole fibers or filaments, staple fibers, spun yarns, and woven or knitted fabrics containing in themselves an organic pigment having heat resistance as high as a thermal decomposition temperature of 200°C or higher, and soluble in a mineral acid and having group(s) of -N= and/or NH- in the molecule, such as any of perinones and/or perylenes, any of phthalocyanines, any of quinacridones, and any of dioxazines, wherein they have a strength retention of 50% or higher when exposed to light from a xenon lamp for 100 hours and having a tensile strength retention of 85% or higher after exposed to an atmosphere of a temperature of 80°C and a relative humidity of 80% for 700 hours.

The polybenzazole fibers or filaments, staple fibers, spun yarns, and woven or knitted fabrics can be used for cords for reinforcing rubber, sheets and rods for reinforcing cement/concrete, composite materials, sail clothes, ropes, knife proof vests and bullet proof vests.