The whitest white paint

Read the full article at rsc.li/3fLOnuy

The world's whitest white paint uses barium sulfate to give its extreme whiteness. Barium sulfate is also a key ingredient in photographic paper and cosmetics. The barium sulfate particles in the paint are all different sizes, and that gives it the broadest spectrum for scattering of light and contributes to its high reflectance.

The majority of white paints on the market use titanium oxide, and reflect 80–90% of sunlight. The new white paint reflects up to 98.1% of sunlight and so keeps surfaces cooler. Scientists say that coating buildings with the product would reduce the need for air conditioning.

Barium sulfate has all kinds of uses, not just paint

The whitest white paint

Read the full article at rsc.li/3fLOnuy

The world's whitest white paint uses barium sulfate to give its extreme whiteness. Barium sulfate is also a key ingredient in photographic paper and cosmetics. The barium sulfate particles in the paint are all different sizes, and that gives it the broadest spectrum for scattering of light and contributes to its high reflectance.

The majority of white paints on the market use titanium oxide, and reflect 80–90% of sunlight. The new white paint reflects up to 98.1% of sunlight and so keeps surfaces cooler. Scientists say that coating buildings with the product would reduce the need for air conditioning.

Barium sulfate has all kinds of uses, not just paint

1. Rank nanoparticle, coarse particle and fine particle in order of increasing size.
2. Explain why painting a building in the white paint could reduce energy usage.
3. Suggest why barium sulfate is used in taking X-ray images of intestines.