

Antimicrobial Material Preservatives Make the World Stronger

Communities across the country and around the world strive to reduce, reuse, and recycle natural and manufactured resources that form products we rely on every day. Many of those critical materials are susceptible to decay, deterioration, or spoilage from microbe colonization. Antimicrobials are chemicals or groups of chemistries that prevent the growth and spread of unwanted microbes, and they help prevent these products from prematurely breaking down. By helping materials last longer, antimicrobials play an important sustainability role and help reduce waste.

Treated Wood Lasts Longer By Resisting the Elements

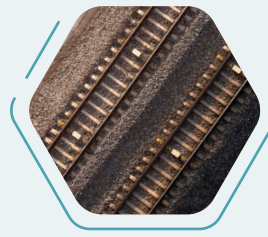
As a key component in buildings, interior furnishings, and infrastructure, wood is more than the backbone of American industry; it's virtually the entire skeleton. Wood, however, is particularly vulnerable to climate, moisture, and other factors, which can lead to rot and decay from harmful microbial growth. Wood treated with antimicrobial material preservative chemicals can prevent harmful microbial growth, allowing the wood to last exponentially longer than untreated wood. This results in products and materials that require replacement far less often.

Applications Across Wood-Based Industries & Products



Housing and Furniture

From house and window frames to decks, chairs, picnic tables, and fencing, wood is a key component to our homes and property. With antimicrobial material preservatives, the life of wood used in these items can be extended, reducing the need for frequent replacement. Forest resources are thus preserved, providing an economic and environmental benefit.



Railroad

More than 150,000 miles of railway tracks in the United States are bound with wooden railroad ties. In fact, wood ties make up more than 95% of the ties because wood provides the natural flexibility that is needed for railroad function. Ties that are treated with antimicrobial preservatives can remain functional and in use for more than 50 years as compared to untreated ties that last five years or less.



Marine

Treated wood is commonly used to build piers, docks, and marina structures. The marine environment is harsh, and wood is susceptible to marine borers, insects, and fungal decay. In such an open environment, untreated wood will last only a few years, but treatment can extend wood's life significantly. Approval to use antimicrobials in marine environments requires that the Environmental Protection Agency fully assesses the preservatives to ensure there is no detrimental effect on the aquatic environment.



Utility Poles

Material preservatives used in wooden utility poles allows them to be an equally viable option to poles made of concrete or steel. However, poles made of wood require far less energy and resources to manufacture, and their production results in dramatically less fossil fuel use, greenhouse gas emissions, consumption of water, and smog formation.

Antimicrobial Benefits to Economic & Environmental Sustainability



Extends life-cycle of
lumber materials



Reduces need for
unnecessary manufacturing



Helps products remain productive
for longer duration



Decreases consumption
of timber resources



Allows for recycling or
repurposing of wood products



Reduces safety risks of
products collapsing or breaking

