Borogard® ZB in oriented strand board

Zinc borate for built in protection

Borogard ZB is not only the best treatment available, it’s also the only treatment that has proven effective in protecting oriented strand board (OSB) over time.

Oriented strand board (OSB) is the board of choice for architects, engineers, and specifiers. Low cost and high performance are the hallmarks of this engineered building material, most often used for roof, wall, and floor sheathing. Sustainability is another—OSB makes more efficient use of wood fiber than any other sheathing product.

Despite the fact that OSB is known for its many strengths, it does have one potential weakness. Like any wood product, untreated OSB is vulnerable to termites, decay fungi, and other wood destroying organisms.

The best way to protect OSB—and in the process, protect homes and other structures built with OSB—is to build protection into the batch with Borogard ZB, the leading zinc borate treatment. Treating OSB with Borogard ZB is not only the best treatment available, it’s also the only treatment that has proven effective in protecting OSB over time.

Here are the facts about how Borogard ZB protects one of the world’s best building materials from its worst enemies:

• Cost effective protection: Borogard ZB costs less and works better than any other OSB treatment on the market. Moreover, OSB treated with Borogard ZB is nearly 10 times less expensive than pressure-treated plywood.

• Complete protection: Scanning electron microscopy—which allows scientists to look at OSB at 50X magnification—shows that Borogard ZB is dispersed evenly throughout the OSB—unlike other treatments where the preservatives protect only a fraction of the entire board. Moreover, Borogard ZB is stable and doesn’t disperse or evaporate.

• Compatible protection: Preservative levels of Borogard ZB (from 0.75% to 1.5%) do not affect the physical properties of OSB. Data shows that OSB treated with Borogard ZB maintains its strength with the full spectrum of adhesives, including MDI and PF adhesives. Borogard ZB also provides natural protection against metal corrosion, unlike other, untested OSB preservatives.

• Broad spectrum protection: Composite products treated with Borogard ZB resist every type of decay fungi they’ve been tested against, including copper-tolerant fungi. Composite products treated with ammoniacal copper have not. In fact, they have proven ineffective against copper-tolerant fungi.

• Lasting protection: Borogard ZB was developed more than a dozen years ago specifically to provide lasting protection to wood composites. More than a decade of lab and field research proves that Borogard ZB can stand the test of time, unlike newer treatments. In fact, zinc borate treatment is typically used as the benchmark against which other preservatives are measured, and is the only wood composite treatment recognized as effective by the American Wood Protection Association (AWPA).

• Safe protection: Borogard ZB is deadly for termites and decay fungi, but safe for people, pets, and the environment. No special tools, handling, or disposal are required when working with OSB treated with Borogard ZB.
About U.S. Borax

U.S. Borax, part of Rio Tinto, is a global leader in the supply and science of borates—naturally-occurring minerals containing boron and other elements. We are 1,000 people serving 500 customers with more than 1,700 delivery locations globally. We supply 30% of the world’s need for refined borates from our world-class mine in Boron, California, about 100 miles northeast of Los Angeles. We pioneer the elements of modern living, including:

- **Minerals that make a difference:** Consistent product quality secured by ISO 9001:2015 registration of its integrated quality management systems
- **People who make a difference:** Experts in borate chemistry, technical support, and customer service
- **Solutions that make a difference:** Strategic inventory placement and long-term contracts with shippers to ensure supply reliability

About 20 Mule Team® products

20 Mule Team borates are produced from naturally occurring minerals and have an excellent reputation for safety when used as directed. Borates are essential nutrients for plants and key ingredients in fiberglass, glass, ceramics, detergents, fertilizers, wood preservatives, flame retardants, and personal care products.