Innovative Technologies
Enhancing the Performance of Engineered and Solid Wood
Lonza
Lonza Wood Protection is truly a global business, with locations around the world where we collaborate on product and technology platforms and share broad industry knowledge with regional market-focused technical, sales, marketing and regulatory expertise.

Lonza’s sales and service model features offerings tailored to your needs. These include but are not limited to engineering, planning, regulatory, and marketing. In addition, we operate our own fleet of trucks to ensure on-time delivery of our quality products.

WE ENVISION A WORLD BUILT WITH WOOD™

At Lonza, we support a better quality of life for our communities by delivering technologies that enhance the performance and increase the longevity of wood, the world’s greatest renewable resource™.

Through strategic acquisitions and in-house formulation expertise, Lonza has developed a comprehensive portfolio of innovations in treatments designed for products such as freshly sawn lumber, windows and doors, siding, fascia, and engineered wood products.

Lonza also continues to be a trusted supplier in the field of wood protection, making wood resistant to mold and moisture, termites, fungi, smoke development and flamespread while enhancing its beauty. We support our customers with an industry leading level of service designed to boost their success.
**ANTIBLU® WOOD PROTECTION PRODUCTS**

AntiBlu® anti-sapstain products provide short-term protection for logs, poles, and lumber against biological growth that can harm the wood’s color and desirability. This product line includes the Mycostat® products as well as defoamers, end sealers and markers, anti-iron stains, and insecticide additives.

**WOLMAN® AG**

Wolman® AG is a non-metallic preservative that is ideal for protecting windows, doors, house trim and other millwork. It can also be used for interior applications such as sill plate and framing. GreenSpec® listed.

**WOLMAN® VA**

Wolman® VA is an LOSP (Light Organic Solvent Preservative) wood treatment. It is used for applications including siding, millwork, trim, and structural members. Wolman® VA preservative is versatile and does not affect wood’s moisture content or cause it to swell.

**WOLMAN® I**

Wolman® I is used to treat wood and wood components, such as door jambs, sills and window joinery. It is intended for use to control wood decay fungi. Designed for the millwork industry, Wolman® I and can be tank mixed with other preservatives to customize treatments for specific millwork needs.

**FRAMEGUARD® TREATMENT**

FrameGuard® treatment is a combined solution of anti-mold chemicals and preservative technology, providing protection against mold and termites. It protects lumber, plywood, OSB, wood I-joists, and laminated wood. GreenSpec® listed.

**PERMATEK® INSECTICIDES**

Permatek® products are specially formulated insecticides for the control of wood damaging insects in engineered wood products. They can be used in a glueline process, adding protection to all layers of engineered wood, or as a surface treatment.

*Not all products are available in all markets. Ask your sales representative about products in which you are interested.*
What does wood look like when it leaves your mill?
Lonza Wood Protection is the leading supplier of anti-sapstain products to the North American sawmill industry for the control of mold on lumber and wood products. We provide turnkey solutions, protecting your lumber from mold growth with industry leading names in mold prevention.

Mold is present everywhere. If not controlled, mold can affect the appearance and performance of wood within a matter of days.

Lonza products protect against mold and sapstain and reduce degrade and promote higher profit margins.

Anti-sapstains from Lonza are intended for sawmills; exporters; log home, truss, utility pole manufacturers; engineered wood manufacturers; and other timber operations seeking economical anti-sapstain and related products from a single, service-oriented supplier.

**Antiblu® Specialty Wood Products**

- Prevents mold and stain leading to cleaner, brighter wood for up to six months
- Some products protect against decay fungi as well as insects
- Cost-effective and efficacious
- Easy to mix and to use
- Available with user-friendly test kits
- Can be applied using Diaplex™ systems and monitored by SmartFlow™ computer systems
- Backed by unsurpassed support services
- Used throughout the North American sawmill industry with billions of board feet of green and kiln dried lumber treated each year

<table>
<thead>
<tr>
<th>Product</th>
<th>Use</th>
<th>Application</th>
<th>Advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-sapstains</td>
<td>• Control of sapstain, mold and decay</td>
<td>Surface applied via dip or spray</td>
<td>Protects freshly sawn and seasoned wood for up to six months</td>
</tr>
<tr>
<td></td>
<td>• Line includes products that protect against fungi and wood-boring insects</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Defoamers</strong></td>
<td>• Keep foam from vibro screens, return lines, agitators, and other areas that commonly generate foam</td>
<td>Added to dip tank or spray box</td>
<td>Prevents foam during treatment process</td>
</tr>
<tr>
<td><strong>Brighteners</strong></td>
<td>• Sequesters the iron</td>
<td>Added to spray system or dip tank</td>
<td>Prevents iron stain on wood</td>
</tr>
<tr>
<td><strong>Borates</strong></td>
<td>• Complements other anti-sapstain products</td>
<td>Surface applied via dip or spray</td>
<td>Offers termite resistance</td>
</tr>
<tr>
<td></td>
<td>• Protects against wood-destroying organisms</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Wolman® AG is a metal-free preservative used as surface treatment for windows, doors, trim, and other millwork.

Wolman® AG is an excellent surface treatment for many parts of your house, such as:
1. windows
2. doors and trim
3. fascia and corner boards
4. garage surround
   as well as siding, sill plate, engineered wood products and other millwork and wood products. It can be used to protect exterior millwork with an approved factory-applied primer.

Wolman® AG consists of three active ingredients. Tebuconazole and propiconazole are synergistic fungicides that protect against fungal decay. The third constituent is imidacloprid, a proven insecticide which enables wood to resist termite attack.

Wolman® AG has qualified under the Window & Door Manufacturers Association (WDMA) Water-Repellent Preservative Treatment for either pressure or non-pressure applications.

**Noteworthy Characteristics**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actives</td>
<td>Propiconazole, Tebuconazole, Imidacloprid</td>
</tr>
<tr>
<td>EPA registration</td>
<td>75506-7</td>
</tr>
<tr>
<td>AWPA standards</td>
<td>P45, U1, T1</td>
</tr>
<tr>
<td>WDMA conformance</td>
<td>Meets I.S. 4 for pressure and non-pressure applications</td>
</tr>
<tr>
<td>Flash point</td>
<td>100°C / 212°F</td>
</tr>
<tr>
<td>Boiling point</td>
<td>&gt; 100°C / 212°F</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Do not freeze</td>
</tr>
<tr>
<td>Density</td>
<td>8.78 lb/gal</td>
</tr>
</tbody>
</table>

**Advantages**

- Protects against termites and fungal decay
- Can be applied using Diaplex™ systems and monitored by SmartFlow™ computer systems
- GreenSpec® environmentally preferable product

Wolman® VA is a light organic solvent preservative (LOSP) that has been used globally for nearly half a century. Applications in the US include siding, millwork, trim, windows and doors and engineered wood products.

Wolman® VA preservative is a versatile pesticide that can be applied by dipping, spraying, or pressure treatment. Its active ingredients are listed in the Standards of the American Wood Protection Association (AWPA). Wolman® VA is accepted for use in pressure and non-pressure applications under the WDMA Water-Repellent Preservative Treatment Certification Program.

The preservative consists of three constituents: two fungicides — tebuconazole and propiconazole — combined with the insecticide, permethrin. It also includes water repellent agents. All are dissolved in a common solvent.

### Noteworthy Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actives</td>
<td>Propiconazole, Tebuconazole, Permethrin</td>
</tr>
<tr>
<td>EPA registration</td>
<td>75101-1</td>
</tr>
<tr>
<td>AWPA standards</td>
<td>P41, P42</td>
</tr>
<tr>
<td>WDMA conformance</td>
<td>Meets I.S. 4 for pressure and non-pressure applications</td>
</tr>
<tr>
<td>Flash point</td>
<td>100°C / 212°F</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Do not freeze</td>
</tr>
</tbody>
</table>

### Advantages

- Treatment does not affect wood’s moisture content or cause it to swell; allows for preservative treatment of wood products that are fully machined
- Incorporates proprietary water repellents which provide superior stability and water resistance
- Eliminate need to machine lumber after treatment, minimizing treated waste
- Active ingredients are insoluble in water and resistant to leaching
- Effectiveness of preservative has been proven over many years in a multitude of applications
Wolman® I controls the effects of microbial pests such as decay. It is designed for the millwork industry.

Wolman® I is ideal for use in millwork. The preservative is known as IPBC, a broad spectrum fungicide that protects against wood decay fungi. Wolman® I is listed with WDMA.

**Advantages**
- Ready-to-use treatment
- Can be applied using Diaplex™ systems and monitored by SmartFlow™ computer systems
- Can use co-solvents to improve cold weather performance and paintability
- Can be used with water repellent to meet specific mill preferences

**Noteworthy Characteristics**

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actives</td>
<td>3-iodo-2-propynyl butylcarbamate</td>
</tr>
<tr>
<td>EPA registration</td>
<td>62190-38</td>
</tr>
<tr>
<td>WDMA conformance</td>
<td>Meets I.S. 4 for pressure and non-pressure applications</td>
</tr>
<tr>
<td>Flash point</td>
<td>43 °C / 110 °F</td>
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<tr>
<td>Freezing point</td>
<td>Not available</td>
</tr>
</tbody>
</table>
Permatek® IM30 solution is a cost effective termite protection that can be used for veneers as well as for millwork and framing.

Permatek® IM30 is a cost effective product designed to protect against insects, including termites and borers. It is designed for incorporation into engineered wood products during manufacture. It can also be used in a spray or dip application for veneers and lumber.

Permatek® IM30 contains the active ingredient imidacloprid.

**Advantages**
- Protects against insects such as borers and termites
- Can be used as a glueline additive
- Can be applied through a spray system to veneers and lumber products
- Can be applied using Diaplex™ systems and monitored by SmartFlow™ computer systems
- Free of VOCs
- Low mammalian toxicity
FrameGuard® treatment protects lumber, plywood, OSB, wood I-beams, trusses, structural insulated panels, and other wood products intended for interior use from attack by organisms such as mold and termites that can cause deterioration, odor, and complaints. In conjunction with Lonza-approved, factory-applied primers, it can also be used to protect exterior trim or siding.

FrameGuard® treatment is applied at a treating plant, lumber mill, distribution yard, or other facility where the quality of coverage can be controlled more precisely than on a job site.

**Advantages**
- Protects against mold growth
- Protects against termites
- Can be applied using Diaplex™ systems and monitored by SmartFlow™ computer systems
- GreenSpec® environmentally preferable product

FrameGuard® treatment is a solution that combines preservatives with mold and termite protection.

Lonza brings its innovative solutions to customers by providing the most advanced spray systems and computer technology available within the North American lumber industry.

**Diaplex™ Spray Systems**

Lonza’s innovative Diaplex™ Lineal and Transverse Spray Systems are turnkey equipment designed to apply our industry-leading moldicides and anti-sapstains as well as our other surface applied technologies.

The Diaplex™ Spray System is:

- The most advanced technology in spraying
- Easy to use and reliable
- Made from high quality stainless steel
SmartFlow™ Computer Systems provide real-time information on all facets of your Diaplex™ spray equipment, giving you confidence that your lumber will look good throughout the supply chain. It can even be accessed and monitored remotely.

SmartFlow™ manages:
- Retentions to ensure the right amount of product is being used to reduce waste
- Cost per thousand board feet
- Operations to keep your system running efficiently and cost effectively

SmartFlow™ provides:
- Spray pressure & flow controls
- Enhanced sump logic
- Warnings and alarms
- Data collection
- Real-time web access
- Daily reports
Permatek® glueline additive is designed for engineered wood products (EWP) such as plywood, LVL, and OSB from destructive termites, borers, and other damaging insects.

It is specifically designed for treating EWPs via addition into the resin prior to lay-up and pressing. Several compounds are used in Permatek® products, including imidacloprid and encapsulated bifenthrin. Lonza works closely with glue manufacturers to ensure that our additives do not affect the bond strength of the resins.

Our glueline additive application rates can be tailored for the specific needs of clients, ensuring the best results for your end product.

Advantages

- Glueline treatment that effectively protects against termite attack
- Protection from the inside, often avoiding the need for surface applied insecticide
- Eliminates need for additional perimeter termite protection of treated structures
- Retention analysis available
- Ongoing technical application support
- Commercial use in a variety of manufactured wood products

Permatek® products are specially formulated insecticides for the control of wood damaging insects in engineered wood products.
The Benefits of Wood

Lonza Wood Protection has been enhancing the natural characteristics of wood for nearly a century. During that time our preservatives have changed and our technology has improved; however, our commitment to creating a product that lasts while protecting our greatest natural resource has never waivered.

Our brands enhance the environmental advantages associated with wood. The source is a renewable resource typically grown on managed timberlands and requiring less energy to produce than alternative building materials. Growing trees absorb carbon dioxide and wood products sequester carbon, both reducing greenhouse gases. Wood offers greater insulation value than alternatives, and, because of its light weight, wood can often be installed with lighter equipment which further reduces the environmental impact.

Wood offers excellent workability with common construction skills and tools, plus it provides design flexibility and economy. Wood is generally less costly than alternative building materials and is easier to work with, not to mention aesthetically preferable in many applications.

For more information, visit

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