



IRIDEA

INTERIOR COATINGS

ASEPTICA

HIGH-RESISTANCE SANITIZING COATINGS

The products in the **ASEPTICA** range are ideal for coating interior furnishings, wooden flooring and generally any objects or surfaces which must necessarily offer a guarantee of the **utmost cleanliness and hygiene**. These coatings have been specially formulated to provide excellent **surface/object protection** levels and deliver **extraordinarily high chemical/physical resistance**. Furthermore, the presence of **active metals** boosts durability and protects the coating film from bacterial attack.

Conducted in accordance with **ISO 22196:2011** standards at accredited laboratories, tests have shown that surfaces coated with products from the ASEPTICA range ensure an **actual reduction of bacterial growth in 24 hours**.

Therefore, any surfaces treated with **ASEPTICA** top coats are extremely clean and hygienic.

Spray, roller and curtain-coater application

CHARACTERISTICS & ADVANTAGES

- High chemical/physical resistance.
- Acts as a barrier and shields the surface against dirt and bacterial attack.
- The effect lasts over time, protecting the coating both in the liquid state and in the solid state (after application).
- Reference standard: ISO 22196:2011.
- Various kinds of coating: water-based, solvent-based, water-based UV and UV high solid.
- Transparent and pigmented.





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FAQ

1. Is a disinfectant the same thing as a sanitizer?

No, disinfectants are biocides registered with the Ministry of Health and their main aim is to kill bacteria (they have an anti-bacterial action). On the other hand, sanitizers may simply be detergents which remove dirt, exerting a physical or mechanical action and therefore also acting on harmful microorganisms, such as germs and bacteria.

2. Is a coating that contains a biocidal substance a biocide itself?

No, it is not enough for a coating to contain a biocide to automatically become a biocide itself. The biocide in the formulation may have been registered for different purposes: as a real biocide, a canned preservative or a wood preserving agent. The disinfecting power of a coating can only be advertised as a primary feature if the coating has been registered as a biocide.

3. What are treated articles?

Treated articles are products with a secondary bacteriostatic action. The sanitizing coatings from the ASEPTICA range fall into this category.

4. So, treated articles and biocides are not one and the same?

No, because treated articles don't require registration and biocides do.

5. Can a company in the wood-furnishings sector (for instance, a door/window/kitchen cabinet manufacturer) promote the antibacterial and/or sanitizing effect of the product coated with ASEPTICA?

Yes, because the item would be a treated article for which the anti-bacterial effect is definitely secondary so it can be advertised.

6. If I coat an item with the products from the ASEPTICA range, can I say that bacterial growth on the surface has been curbed or that the bacterial population has been reduced?

Yes. In order to do this, the product manufacturer ought to run tests on the coated product and obtain a test report from an external laboratory. At this point, the manufacturer can promote the product, citing the outcome of the test.

7. Does the inhibitory effect on bacterial growth last for a specific amount of time?

The effect lasts over time, protecting the coating both in the liquid state and in the solid state (the coating after it has been applied and dried out).

8. What reference tests/standards are there to assess to the behavior or status of the bacterial population on a coated surface?

The original standard to first examine bacteriostatic effects is the JIS Z2801 (Japan International Standard).

The method was incorporated into European-Union regulations and certified as **ISO 22196:2011**.

The ISO 22196:2011-standard antibacterial test specifies a method of evaluating the antibacterial activity of anti-bacterial-treated plastics, and other non-porous surfaces of products (including intermediate products). Standard testing is against bacteria such as **Escherichia coli** (Gram -) and **Staphylococcus aureus** (Gram +). The test is conducted with a reference count for the purposes of comparison (parallel control specimen/untreated specimen). The test consists in placing a drop of bacterial suspension of a known titer on the surface of the specimen and leaving it for a 24-hour period of contact. When the suspension is retrieved with a known volume of solution, the colonies can be sown and counted. After the incubation period, the microbial concentration is established. The reduction in microorganisms compared to the original concentration and the control surface is measured.

The antibacterial efficacy is expressed with the value R which stands for the difference between the number of bacteria deposited on the untreated reference specimen and the number of bacteria retrieved after contact with the antibacterial-treated surface. Last of all, the logarithmic reduction in viability on the treated specimens as compared to the untreated specimens is established.

The values are expressed on a logarithmic scale. Generally speaking, R=3 is considered to be a good result because it indicates that the bacteria has been reduced by 1,000 times.

Note:

As for the two strains used for the bacteriological tests, Staphylococcus aureus is one of the most common bacteria around and is to be found on the skin, mucous membrane, intestine, the air, surface waters, the soil, etc.; its ideal temperature for growth is 37°C. On the other hand, Escherichia coli naturally occurs in the intestine and grows best at temperatures ranging between 37°C and 44°C. Staphylococcus aureus and Escherichia coli were chosen for their resilience and adaptability.