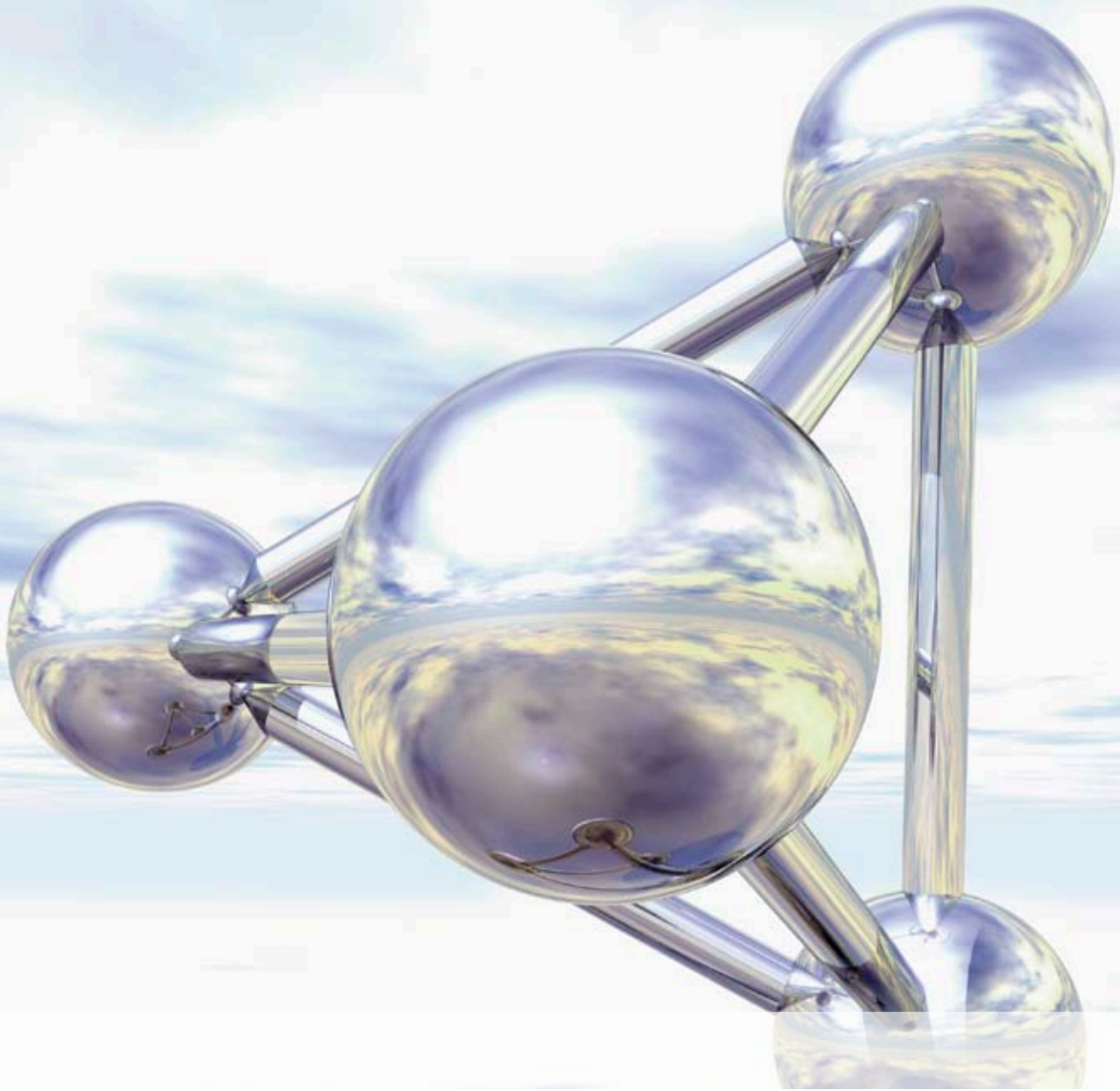


Otto Bock[®]

QUALITY FOR LIFE



SKINGUARD[®] Technology

Information for Practitioners





Various silver technologies such as Sanitized® and SilverShield® are grouped under the brand SKINGUARD® technology. SKINGUARD® technology from Otto Bock protects the product as well as the skin that comes into contact with the product against a wide range of different microorganisms.

Sanitized® technology, for example, is used for our liner segment, while SilverShield® technology is used for thermoplastics.

SKINGUARD® technology reduces odours and discoloration from microbes and ensures a longer service life for the products as well as making them more comfortable to wear and increasing skin comfort.

Various antibacterial substances are used that are based on different working principles.

For example, technologies with silver have ions that act to prevent the accumulation of bacteria as soon as the products come into contact with moisture. The ions interact with the bases of bacteria's DNA and RNA. This substantially interferes with the reproduction of various microorganisms. And prevents the bacteria population from increasing in the material.

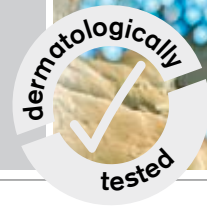
The products included under SKINGUARD® technology also offer high skin tolerance, as all our other products. Furthermore, we guarantee that the physical and mechanical properties of the product itself will not change.

However, it should be emphasized that SKINGUARD® technology is not designed for infection prophylaxis.

In order to ensure the effect of the supplement, various standardized tests have been performed to prove the reduction in microbes.

SKINGUARD® Technology

in Cooperation with North Sea Plastics



SilverShield® Technology

SilverShield® technology¹ is the first antibacterial product line of thermoplastics available in orthopaedic technology for the production of soft inner sockets and flexible inner sockets for prostheses. The silver ions bonded to the plastic effectively fight a wide spectrum of pathogenic bacteria and ensure excellent skin tolerance.

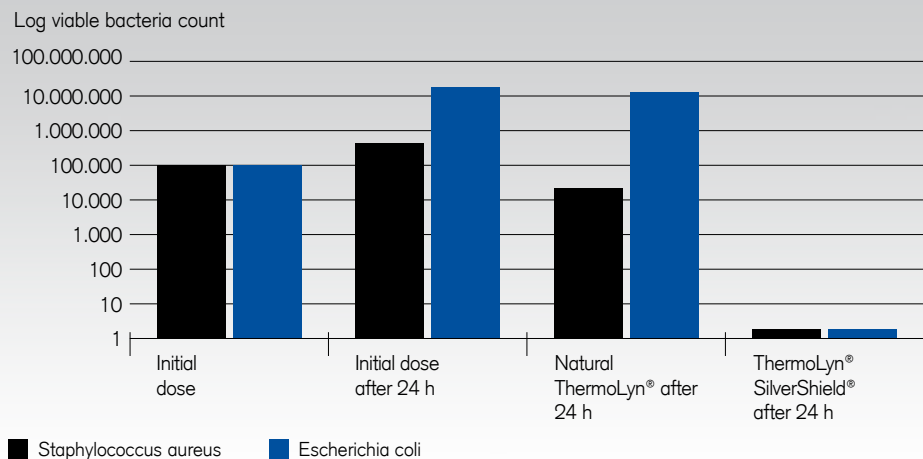
SilverShield® releases silver ions at an extremely low speed when it comes into contact with water molecules. The released silver ions produce a reaction with the bacteria, prevent its growth and are available again if the bacteria reemerges.

SilverShield® enables the antibacterial plastics to have a high and long-lasting effect.

The dermatological tests were conducted at the SGS Fresenius Institute in Germany. The antibacterial substance silver does not lead to any impairment of the physical properties or the forming properties of the thermoplastics.



Efficiency of SilverShield® technology according to the JIS Z 2801 standard²

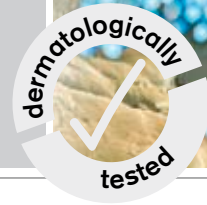


¹ SilverShield® is a registered trademark of North Sea Plastics.

² Laboratory in Japan, A.C. Barclay, August 2005.

SKINGUARD® Technology

in Cooperation with Sanitized®



Sanitized® Technology

The antibacterial additive Sanitized® protects the product and skin. It also makes the prosthesis comfortable to wear. Sanitized® is currently being added to our 6Y75 SiliconGel-Liner to offer hygienic protection.



The additive silver is a scientifically undisputed substance whose effect on bacteria is known. Our Sanitized® technology uses a glass ceramic holder. This ensures that the antibacterial protective equipment is firmly anchored to the silicon material and thus achieves long-lasting protection.

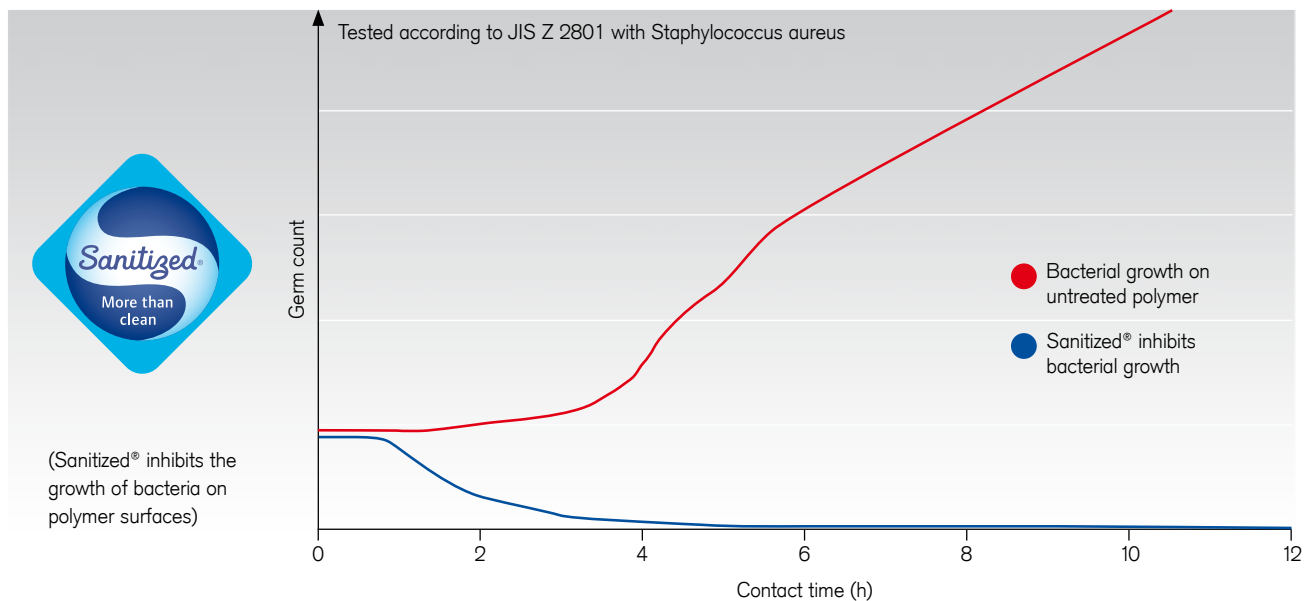
Silver ions cannot diffuse from the material thanks to the glass ceramic technology.

The natural microflora of the skin is not changed in any way by the product.


Of course, we ensure the protective effect of all our products with Sanitized®. Independent lab tests according to the JIS Z 2801 standard have proven that Sanitized® on a silver base reduces the bacteria population of *Staphylococcus aureus* (gram positive) by 95%.

Furthermore, as with all our products that come into contact with the skin, tests are conducted for cell damage according to ISO 10993 Part 5. All products with Sanitized® are subject to an internationally recognized test and risk analysis.

Dermatological tests, such as the epicutaneous test, for example, have proven that there are no negative changes to the skin. This test is conducted at the internationally recognized SGS Fresenius Institute in Germany.







Please contact us if you have any further questions
or would like to have more information.

Otto Bock®

QUALITY FOR LIFE

Otto Bock HealthCare GmbH

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