

# T E S T C E R T I F I C A T E

## BT-20-08-11-02

**Client:** Kronospan HPL sp. z o.o.  
ul. Wojska Polskiego 3, 39-300 Mielec, Poland

**Product:** Laminate HGP/HGS according to EN 438

**Order:** Determination of the antibacterial properties of surfaces

**Test engineer:** Dipl.-Biol. Katharina Plaschkies

**Test standard:** ISO 22196 (2011): Measurement of antibacterial activity on plastics and other non-porous surfaces

**Inoculum:** 500,000 CFU/ml

**Incubation:** 24 hours at 36 °C

**Reference material:** Polyethylene film

**Test area:** 40 mm × 40 mm

**Test report:** no. 2220029-A1 (16/07/2020)

**Results:**

**Decimal logarithm of the number of viable bacteria  
after the incubation time of 24 hours [CFU/cm<sup>2</sup>]**

	<i>Staphylococcus aureus</i> DSM 799	<i>Escherichia coli</i> DSM 1576
Reference material	$U_{T\_Sa} = 3.4$	$U_{T\_Ec} = 3.2$
Test product	$A_{T\_Sa} < 1.1$	$A_{T\_Ec} < 1.1$
<b>Antibacterial activity*: <math>R = U - A</math></b>		
Test product	<b><math>R_{Sa} &gt; 2.3</math></b>	<b><math>R_{Ec} &gt; 2.1</math></b>

\*) A clear antibacterial activity is given if  $R \geq 1.0$  at both bacteria strains.

**The test product is classified as "antibacterial".**

Dresden, 11/08/2020



Head of laboratory




Engineer in charge