



WKI • FRAUNHOFER-INSTITUT • Bienroder Weg 54 E • D-38108 Braunschweig

Werzalit AG + Co. KG  
Gronauer Straße 70

71720 Oberstenfeld  
Germany

Institutsleiter:  
Prof. Dr. Rainer Marutzky

Bienroder Weg 54 E  
D-38108 Braunschweig

Telefon +49 (0) 531/2155-0  
Telefax +49 (0) 531/351587  
<http://www.wki.fhg.de>

Prof. Dr. Rainer Marutzky  
Durchwahl +49 (0) 531/2155-212  
Telefax +49 (0) 531/2155-200  
E-Mail: [marutzky@wki.fhg.de](mailto:marutzky@wki.fhg.de)

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### Expert Report No. 1300/04

#### Phyto-sanitary properties of *WERZALEN*<sup>®</sup> components

**Packing material produced by WERZALIT** based on the material **S2 - the high-tech wood**<sup>®</sup> respectively **WERZALEN**<sup>®</sup> are newly manufactured wood composite products. This material is based on a mixture of wood particles and polyolefin thermoplastics. According to the WERZALIT process in a first step the wood particles are dried to a moisture content of less than 2 % at around 180° C (356° F). In a second step the particles are mixed with thermoplastics also in a temperature range between 180°C and 220 °C and in a third step this semi-finished products will be heated once again to a temperature between 180° C and 220° C to create the three-dimensional finished packing product. It can be regarded as a heat treated product, like plywood, particle board or Oriented Strandboard.

**Packing material** based on the material **S2 - the high-tech wood**<sup>®</sup> respectively **WERZALEN**<sup>®</sup> is considered as being sufficiently processed like heat treated solid wood according the "International phytosanitary standard for wood packaging (ISPM15)". The temperatures above 180° C during the drying and moulding process will destroy all micro-organisms, insects, plant seeds and other living parts in or on the wood. After moulding the material is totally free of insects or plant pests. The high density (>1000 kg/m<sup>3</sup>), the closed surfaces and the resin content act as an effective barrier for new biological contaminants. A special treatment according to the ISPM15 is not needed.

Prof. Dr. Rainer Marutzky  
- Head of the Institute -

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