

DUDATE





Fraunhofer TESTED® DEVICE DENSO WAVE Inc. PC (VG1950) Report No. DE 1409-725

Statement of Qualification

Biological Resistance

Statement of Qualification

Customer

DENSO WAVE Inc. 1, Yoshiike, Kusaki, Agui-cho, Chita-gun 470-2297 Aichi Japan

Test result/Classification



Component tested

		DIOI
Category:	Materials	con
		asse
Subcategory:	Plastics	
		0 =
Product name:	PC (VG1950)	1 =
	(manufacturing date: 12/2014; color: black)	2 =

Biological resistance test

Standards/Guidelines:

Test environment parameters:

Test procedure parameters:

ISO 846; VDI 2083-18 The norms stated refer to the relevant editions applicable at the time of the tests.		
Microbiological laboratory:		
• Fungus test (Procedure A) using spore suspension containing:		
– Aspergillus niger – Penicillium funiculosum – Paecilomyces variotii	– Gliocladium virens – Chaetomium globosum	
• Bacteria test (Procedure C) using bacteria suspension containing <i>Pseudomonas aeruginosa</i>		
 Incubation at 24°C (Procedure A) 95% relative humidity. Visual ana 	respectively 29°C (Procedure C) and lysis after four (4) weeks	

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IPA

For further information about the test environment and parameters, please refer to the Fraunhofer IPA test report.

Fraunhofer Institute for Manufacturing Engineering and Automation IPA

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Place, current date



ogical resistance	ISO growth intensity	Classification
i (Procedure A)	1	very good
eria (Procedure C)	1	very good
rall result	1	very good

Biological resistance has been classified on the basis of a worst-case consideration of Procedures A and C. In the process, growth intensity was assessed according to the classification system used in ISO 846:

= excellent = very good = good

3 = poor4 = very poor 5 = none

The measuring devices used for the qualification tests are calibrated at regular intervals; their results can be traced back to national and international standards. In cases where no national standards exist, the test procedure implemented complies with the technical regulations and norms applicable at the time of the test. The relevant documentation can be viewed on request at any time.

Stuttgart, July 15, 2015

Place, date of first document issued

Ado Somme

Udo Gommel, Project Manager Fraunhofe

This document only applies to the named product in an unchanged state and is valid from the date of issue for a period of 5 years. The document can be verified under www.tested-device.com