



**Fraunhofer**

**TESTED<sup>®</sup>  
DEVICE**

Coroplast  
Coroflex Hospital 4000  
**Report No. CO 1509-784**

DUPLICATE

Statement of  
Qualification

Biological Resistance

# Statement of Qualification

## Customer

Coroplast Fritz Müller GmbH & Co. KG  
Wittener Strasse 271  
42279 Wuppertal  
Germany

## Component tested

Category: Materials  
Subcategory: Plastics  
Product name: Coroflex Hospital 4000  
(manufacturing date: 8/2015; color: light gray; serial number: 29-4000)

## Biological resistance test

Standards/Guidelines: ISO 846; VDI 2083-18  
The norms stated generally refer to the version valid at the time of the tests.

Test environment parameters: Microbiological laboratory:.....S2

Test procedure parameters:

- Fungus test (Procedure A) using spore suspension containing:
  - *Aspergillus niger*                      – *Gliocladium virens*
  - *Penicillium funiculosum*         – *Chaetomium globosum*
  - *Paecilomyces variotii*
- Bacteria test (Procedure C) using bacteria suspension containing  
*Pseudomonas aeruginosa*
- Incubation at 24 °C (Procedure A) respectively 29 °C (Procedure C) and 95 % relative humidity; visual analysis after four (4) weeks

## Test result / Classification

The biological resistance of the cable sheathing material Coroflex Hospital 4000 with regard to growth intensity was investigated in accordance with ISO 846 and classified with the following result:

Biological resistance	Growth intensity	Classification
Fungi (Procedure A)	0	excellent
Bacteria (Procedure C)	0	excellent
<b>Overall result</b>	<b>0</b>	<b>excellent</b>

The classification is based on 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:

0 = excellent	3 = weak
1 = very good	4 = very weak
2 = good	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.

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

Stuttgart, March 20, 2016

Place, date of first document issued

Department of Ultraclean Technology and Micromanufacturing

--

Place, current date

Nobelstrasse 12  
70569 Stuttgart  
Germany

on behalf of   
Frank Bürger, Project Manager Fraunhofer IPA