



Fraunhofer

TESTED[®] DEVICE

igus GmbH
e-skin flat System
Report No. IG 2402-1498

Single product
Particle emission
in Dry-Cleanroom
Aging behavior

Qualification Certificate

This is to certify that the product mentioned above, provided by

igus GmbH
Cologne, Germany

has been awarded a Fraunhofer certificate TESTED DEVICE
bearing the report number IG 2402-1498.

When operated under the specified test conditions (room
temperature of $22^{\circ}\text{C} \pm 1^{\circ}\text{C}$; dew point: $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$), the cable
guiding system e-skin flat System (color: white) is suitable for use
in dry-cleanrooms fulfilling the specifications of the following Air
Cleanliness Classes according to ISO 14644-1:

Aging behavior during continuous operation in Dry-Cleanroom, Test parameter(s)	Air Cleanlines Class
Test 1, new (after running-in period, 0 cycles)	4
Test 2, after 2 months (3.2 Mio. cycles)	4
Test 3, after 4 months (5.1 Mio. cycles)	4
Test 4, after 6 months (7.5 Mio. cycles)	4
Test 5, after 8 months (10.0 Mio. cycles)	4
Test 6, after 10 months (15.1 Mio. cycles)	4
Test 7, after 12 months (20.1 Mio. cycles)	4
Overall result	4

Test parameter: 0.5m/s , 1.0m/s^2 ; 1.0m/s , 2.0m/s^2 ; 2.0m/s , 4.0m/s^2
Please note: Transport damages, incorrect installation, aging
behavior, corrosion etc. can influence the test result.

IG 2402-1498

Report No. first document

Stuttgart, March 28, 2025

Place, date of first document issued

--

Report No. current document

--

Place, current date

on behalf of

Dr.-Ing. Frank Bürger, Project Manager Fraunhofer IPA

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

Detailed information and
parameters of the test
environment can be found
in the Fraunhofer IPA test
report.



Fraunhofer
IPA