IPA

Cleanroom (atmospheric)

valid until: February 13, 2031

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TESTED®
DEVICE

API Metrology
API Radian PRO
Report No. AP 2601-1710

Statement of
Qualification

Single product
Riboflavin Test
(Materials)

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Statement of Qualification · Single product

Customer

Automated Precision Europe GmbH
Im Breitspiel 17
69126 Heidelberg
Germany

Tested product

Category: Process Equipment

Subcategory: Measuring Equipment

Product name: API Radian PRO
(manufacturing date: 9/2025; color: red/black; article number: 65194)

Cleanability test (riboflavin test)

Standards/guidelines: VDMA information sheet »Riboflavin test for low-germ or sterile process technologies – Fluorescence test for examination of cleanability«. The norms stated generally refer to the version valid at the time of the tests.

Test environment parameters: Laboratory

Test procedure parameters:

- Test solution: .....0.2 g riboflavin, 1.0 g hydroxethylcellulose .....in 1000 ml ultrapure water
- Application of test solution:..... pump spray
- Drying time: ..... approx. 2 - 3 h
- Cleaning method:.....wiping
- Cleaning medium:.....ultrapure water
- Number of wiping cycles: 3
- UV-light:.....λ = 366 nm

The cleanability is examined and assessed qualitatively. The assessement based on the amount and size of defects occuring.

Test result / Classification

The examination of cleanability of API Radian PRO was investigated according to VDMA information sheet. The following test result could could be provided:

Classification
weak

The API Radian PRO can only be cleaned to a limited extent by using a simple wiping procedure with ultra-pure water.
The fluorescence test identified several critical areas. It is extremely difficult to clean these areas effectively. These areas have to be cleaned especially thoroughly or using a more complex procedure, e.g. by removing certain parts before cleaning.
The ability to clean the API Radian PRO effectively could be improved by eliminating most of the depressions or undercuts

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.

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

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on behalf of
Dr.-Ing. Frank Bürger, head of business unit Testing and Certification

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**.