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DEVICE

OCTANORM-Vertriebs-GmbH
Powder coating
Report No. OC 1706-924

DUPLICATE

Statement of
Qualification

Chemical Resistance

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Statement of Qualification

Customer

OCTANORM-Vertriebs-GmbH
Raiffeisenstrasse 39
70794 Filderstadt
Germany

Component tested

Category: Materials

Subcategory: Coatings

Product name: Powder coating
(manufacturing date: 6/7/2017; color: RAL 9010 matt;
serial number: IGP 5803A90100A00)

Chemical resistance test

Standards/Guidelines: VDI 2083 Part 17; ISO 4628-1; ISO 2812-1
The norms stated generally refer to the version valid at the time of the tests.

Testing equipment:
- Microscope
- Camera

Test environment parameters: Temperature: ..... 22 °C ± 0.5 °C

Test procedure parameters:

Immersion method:
– Chemicals: ..... Formalin 37 %
..... Ammoniac 25 %
..... Hydrogen peroxide 30 %
..... Sulfuric acid 5 %
..... Phosphoric acid 30 %
..... Peracetic acid 15 %
..... Hydrochloric acid 5 %
..... Isopropanol 100 %
..... Sodium hydroxide 5 %
..... Sodium hypochlorite 5 %
– Incubation time: ..... 1 h, 3 h, 6 h, 24 h

Test result / Classification

The chemical resistance of the powder coating was classified according to ISO 4628-1 and VDI 2083 Part 17 with the following results:

Chemical resistance	1 h	3 h	6 h	24 h
Formalin 37 %	0	0	0	**0**
Ammoniac 25 %	0	0	0	**0**
Hydrogen peroxide 30 %	0	0	0	**5**
Sulfuric acid 5 %	0	0	0	**0**
Phosphoric acid 30 %	0	0	0	**0**
Peracetic acid 15 %	0	0	5	**5**
Hydrochloric acid 5 %	0	0	0	**0**
Isopropanol 100 %	0	0	0	**0**
Sodium hydroxide 5 %	0	0	0	**0**
Sodium hypochlorite 5 %	0	0	0	**0**

The classification is based on a worst-case consideration. In the process, damage was assessed according to the classification system used in ISO 4628-1 and VDI 2083 Part 17:

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

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on behalf of
Frank Bürger, Project Manager Fraunhofer IPA

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