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| Test report – No.: LA 026/21 | Group Applied Coating Technology (LA) | Page 1 of 3 |

Test Report

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| Customer: | Hilti Entwicklungsgesellschaft mbH Hiltistraße 6 86916 Kaufering |
| Number of commission: | |
| Date of commission: | commission from 01.06.2021 by Dr. Andreas Ahlers |
| Storing of samples: | All samples are stored 6 months after delivering the results to the customer, unless the sample material was used up or destroyed by chemical reaction or any other agreements were made |
| Item of contract: | Sample 1: • HIT-HY 200-A V3 hybride-mortar |
| Purpose of contract: | Determination of paint wetting disturbances caused by substances of the item mentioned above according to VDMA 24364 (A1/A3-L/W) |
| Origin of the samples: | delivered by the customer on 16.03.2021 |
| Beginning of tests: | 17.06.2021 |
| End of tests: | 17.06.2021 |
| Designation of the laboratory: | Applied Coating Technology |

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Test method: **Testing of wetting disturbances caused by substances (coating compatibility tests) according to VDMA 24364 (2018-05)**

Zone: 1

Test class A1 (rinse off) and A3 (immerse)

Test substrate:

KTL-substrates Type XM 30-1102-0102
(supplier: BASF, Münster)

Test coating material:

- a) Coating spray (Volkswagen, Friesen green), solvent borne
- b) Waterborne coating, Jupiter red MB 3589 from BASF Coatings AG, (coating material was supplied by Daimler AG), Application by spray gun.

Thickness of the dry coating: approx. 15 µm

Contamination: Rinsing with butyl acetate

The material to be tested is rinsed with butyl acetate. The contaminated butyl acetate is collected in a glass container. Drops of the contaminated butyl acetate are applied on the test substrate. After evaporation of the butyl acetate the contaminated test substrates are coated with the coating materials.

Contamination: 24 h storage in butyl acetate

The material to be tested is completely immersed in the solvent for 24 h. Drops of the extracts are placed on the test plates. The contaminated test panels are coated after evaporation of the solvent with the coating materials.

Assessment:

The visual assessment of wetting disturbances is done immediately after the application of the coating materials and the drying process (15 Min./140 °C).

All tests are carried out twice (double determination).

Test results:

Table 1: Coating compatibility tests :

Results for the water borne coating (red) and the solvent borne coating (green)

| sample: | | Water borne coating (jupiter red) | | Solvent borne coating (fries green) | |
|-----------------|---|-----------------------------------|---------------------------|-------------------------------------|---------------------------|
| | | Butyl acetate-Rinsing | Butyl acetate-Extract 24h | Butyl acetate-Rinsing | Butyl acetate-Extract 24h |
| | | | | | |
| HIT-HY 200-A V3 | 1 | i. O. | i. O. | i. O. | i. O. |
| | 2 | i. O. | i. O. | i. O. | i. O. |

i. O. = no wetting disturbances

date: 17.06.2021 / OZ.

Comments*: none

The test results refer to the samples, only. This test report may not be published (even not in parts) without the allowance of the Fraunhofer Society.

*the comments are an additional interpretation (opinion) beyond the test methods

Stuttgart, 22.06.2021

i. A.

i. A.

Dr. Stefanie Wunder
Project Manager (LA)

Olga Zeitler
Tester (LA)