

Author:	<b>Kerstin Löbbering</b>	Samples IDs:	<b>1-7</b>
Order Number:	<b>2830-13-E-14</b>	Production date:	<b>29.05.2018</b>
Project name:	<b>MVX Smart Disinfect GmbH</b>	Test dates:	<b>20.06.-28.06.2018</b>
Recipe:	<b>different surfaces</b>	Testing after:	<b>22 - 30 days</b>

**General information**

On May 29th the company MVX Smart Disinfect GmbH visit our laboratory in Gladbeck. They present their product MVX. In the outdoor area of the laboratory different surfaces were sprayed with their product.

The samples were tested on the basis of ISO 22197-1 for their photocatalytic activity.

The NOx decomposition rates achieved in the tests were shown in % and mg/m<sup>2</sup>h.

**Pretreatment:**

The test specimens manufactured in the laboratory on May 29th 2018 were stored under laboratory conditions and then pre-exposed to UV-light for 12hours.

The test samples with different surfaces and dimensions were exposed to gas in a reactor based on ISO 22197-1 and the photocatalytic NO oxidation was measured.

**Results :**

Examination No.	Photocatalytic surface	Nox degradation rate		Activity index
		%	mg/m <sup>2</sup> h	
BW 1833862	paving stone, plane	7,2	3,88	very high
BW 1833863	paving stone, rough	5,1	2,68	high
BW 1833864	pavingstone (40x40x3)	16,8	2,95	high
BW 1833865	fiber-board	19,3	3,59	very high
BW 1833866	cement prism	6,9	2,24	high
BW 1833867	large metal plate	2,4	6,52	very high
BW 1833868	smal meatal plate	0,1	0,45	very low

Evaluation scale: ≤1,0: very low; 1,0-1,5: low; 1,5-2,0: moderate; 2,03-3,0: high; ≥3,0: very high

**Evaluation / Conclusion :**



**MAEDA-KOUGYOU, Co.Ltd.**  
 220-1 NorimatsuYahatanishi ward Kitakyushu city Japan  
 T EL:0081-93-695-2010 FAX:0081-93-695-2011

## MIRACLE TITANIUM

### ANTISMELL&AIRPURIFICATION TESTS

Function		Results	Method	Test association
<b>Anti-smell Air purification</b>	Ammonia gas Coated surface Vinyl chloride	3 Hours the gas 63% removal 15 Hours the gas 97%removal	Gas bag test 2006	Hiroshima Environmental Health Association
	Toluene (odor neutral)	3 Hours the gas 65% removal 15 Hours the gas 97%removal		
	H <sub>2</sub> S (acidic smelly)	3 Hours the gas 60% removal 15 Hours the gas 95%removal		
	Formaldehyde	3 Hours the gas 94% removal		
	Acetaldehyde	3 Hours the gas 86% removal		
	Ethylene	3 Hours the gas 65% removal 6 Hours the gas 98%removal		
	Styrene	3 Hours the gas 96% removal		
	Xylene	3 Hours the gas 90% removal		
	Ethyl benzene	3 Hours the gas 75.6% removal 6 Hours the gas 92%removal		
	P-Di chlorobenzene	3 Hours the gas 88% removal		