

Analysis Report

**REPORT NUMBER:
924980.2**



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Page: 1 of 3
Encl.: 1
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Item: Analysis of emission of ozone from UV box during use

Sampling: The assignor

Period: Samples received: 11 May 2020
Test performed: 28 May 2020

Storage: The test material will be destroyed after 3 months, unless otherwise agreed in writing.

Remark: The account of the method(s) used only concerns the analysed sample(s).

Terms: This test was conducted in accordance with international requirements (ISO/IEC 17025:2017) and in accordance with the General Terms and Conditions of Danish Technological Institute. The test results solely apply to the tested item(s) or to the sub-sample(s) selected for analysis. This analysis report may be quoted in extract only if Danish Technological Institute has granted its written consent.

Date/place: 29 May 2020
Danish Technological Institute, Aarhus
Laboratory for Chemistry and Microbiology

Signature: Helle Stendahl Andersen
Business Manager

Introduction

The emission of ozone was tested when using UVC light in an UVC box for disinfection. Short-term tubes were used.

Test procedure

The UV box was switched on, and during the 2-minute cycle the emission of ozone was measured just outside the UV box. The measurement was carried out during three separately cycles.

Experimental conditions

UVC box
SE No.: 2005011
Short-term tubes: Ozon 0.05/b from Dräger

Results

	Run time/cycle: 2 min.
Test organism	O ₃ [ppm]
Cycle 1	<0.05
Cycle 2	<0.05
Cycle 3	<0.05

Table 1

Conclusion

No emission of ozone was measured from the UV box during use.

Enclosure 1

If ozone is present, then the short-term tubes will change colour from light blue to white.

The tubes from the measurements were equal to the background measurement showing that the UV box does not cause any ozone emission.



Figure 1: Short-term tubes after measurements in the following order from left to right: Unused tube, background measurement, measurements during use of the UV box, cycle 1-3.