

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-17433-01-00 according to DIN EN ISO/IEC 17025:2018

Valid from: 16.09.2019

Date of issue: 27.05.2020

Holder of certificate:

Olfasense GmbH
Fraunhofer Straße 13, 24118 Kiel

Tests in the fields:

**Sampling and measurement of odour emissions and measurement of odour immissions;
Immission impact forecast; Determination of the odour intensity and the hedonic tone of air
samples; Polarity profiles, Conditioning and testing the sample container; Determination of odour
emissions from building products using test chambers; Determination of the odour characteristics of
materials;**

Module Immission Control

The testing laboratory is permitted, without being required to inform and obtain prior approval from DAkKS, to use standards or equivalent testing methods listed here with different issue dates. The testing laboratory maintains a current list of all testing methods within the flexible scope of accreditation.

This document is a translation. The definitive version is the original German annex to the accreditation certificate.

Abbreviations used: see last page

*The certificate together with its annex reflects the status at the time of the date of issue. The current status of the scope of accreditation can be found in the database of accredited bodies of Deutsche Akkreditierungsstelle GmbH.
<https://www.dakks.de/en/content/accredited-bodies-dakks>*

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1 Areas of activity within the field of Federal Immission Control Act

1.1 Methods according to Module Immission Control

Measurement method according to Module Immission Control and appendix A2 of VDI 4220. This confirms the fulfillment of the requirement of CEN/TS 15675: 2007.

The requirements for the emission measurements according to DIN EN 15259: 2008 (Measurement of stationary source emissions - Requirements for measurement sections and sites and for the measurement objective, plan and report) are fulfilled.

Testing area/ Identification	Group I.1: Determination of emissions Task area O: Odours			
Component / Source Type	Standard / Directive / Technical Rule		SRM	QM document
	Title	Designation		
Source	Title	Standard		
Odour Active area source	Olfactometry - Static sampling	VDI 3880 2011-10	<input checked="" type="checkbox"/>	M-AA02 M-AA03 M-AA04 M-AA05 M-AA05b M-AA06 A-AA04
	Air quality - Determination of odour concentration by dynamic olfactometry	DIN EN 13725 2003-07 (Corrigenda 2006-04)		
	Olfactometry - Determination of odour concentration by dynamic olfactometry - Supplementary instructions for application of DIN EN 13725	VDI 3884 2015-02		
Odour Passive area source	Olfactometry - Static sampling	VDI 3880 2011-10	<input checked="" type="checkbox"/>	M-AA02 M-AA03 M-AA04 M-AA05 M-AA05b M-AA06 A-AA04
	Air quality - Determination of odour concentration by dynamic olfactometry	DIN EN 13725 2003-07 (Corrigenda 2006-04)		

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	Olfactometry - Determination of odour concentration by dynamic olfactometry - Supplementary instructions for application of DIN EN 13725	VDI 3884 2015-02		
Odour Industrial point source	Olfactometry - Static sampling Air quality - Determination of odour concentration by dynamic olfactometry Olfactometry - Determination of odour concentration by dynamic olfactometry - Supplementary instructions for application of DIN EN 13725	VDI 3880 2011-10 DIN EN 13725 2003-07 (Corrigenda 2006-04) VDI 3884 2015-02	<input checked="" type="checkbox"/>	M-AA02 M-AA03 M-AA04 M-AA05 M-AA05b M-AA06 A-AA04

Testing area/ Identification	Group IV: Determination of immissions Task area O: Odours			
Component / Source Type	Standard / Directive / Technical Rule		SRM	QM document
	Title	Designation		
Odour / Grid measurement	Ambient air - Determination of odour in ambient air by using field inspection - Part 1: Grid method Measurement of odour impact by field inspection - Measurement of the impact frequency of recognizable odours - Grid measurement (withdrawn standard)	DIN EN 16841-1 2017-03 VDI 3940 Bl. 1 2006-02	<input checked="" type="checkbox"/>	M-AA04 M-AA07a M-AA07c M-AA13
Odour / Plume measurement	Ambient air - Determination of odour in ambient air by using field inspection - Part 2: Plume method <i>(Deviation: Static method only)</i>	DIN EN 16841-2 2017-03	<input type="checkbox"/>	M-AA04 M-AA07b M-AA07c

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Odour	Measurement of odour impact by field inspection - Determination of odour intensity and hedonic odour tone	VDI 3940 BI 3 2010-01 (Corrigenda 2011-08)		M-AA04 M-AA07b M-AA07c
Odour	Determination of the hedonic odour tone - Polarity profiles	VDI 3940 BI 4 2010-06		M-AA04 M-AA07d

The methods correspond to the requirements of the
"special proof of competence in the area of immission control"
"LAI Module Immission Control" (updated by the L/W/V in the version of 30th January, 2018).

Competence in the testing and technical task areas

Group I. No. 1: O and Group IV: O

subject to immission control legislation is hereby confirmed.

2 Bestimmung der Geruchsstoffkonzentration

DIN EN 13725 2003-07 (Corrigenda 2006-04)	Luftbeschaffenheit – Bestimmung der Geruchsstoffkonzentration mit dynamischer Olfaktometrie
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3 Determination of the odour intensity and the hedonic tone of air samples

M-AA17 2014-07	In-house method for the determination of the odour intensity and the hedonic tone of air samples
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VDI 3882 Bl. 1 1992-10	Olfactometry; Determination of Odour Intensity
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VDI 3882 Bl. 2 1994-09	Olfactometry; Determination of Hedonic Odour Tone
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3 Determination of the hedonic odor effect - polarity profiles

VDI 3940 Bl. 4 Determination of the hedonic odour tone - Polarity profiles
2010-06

4 Immission impact forecast

Quality Criteria on how to perform and represent dispersion calculations according to the Technical Instructions on Air Quality Control (TA Luft) and the German Guideline on Odour in Ambient Air (GOAA)

VDI 3783 Bl. 13 Environmental meteorology –
2010-01 Quality control concerning air quality forecast –
 Plant-related pollution control –
 Dispersion calculation according to TA Luft

6 Conditioning and testing the sample container

P-AA02 Conditioning and testing the sample container
2019-06
P-AA02a
2019-06

7 Determination of odour emissions from building products using test chambers

DIN ISO 16000-28 Indoor air –
2012-12 Part 28: Determination of odour emissions from
 building products using test chambers

ISO 16000-9 Indoor air –
2008-04 Part 9: Determination of the emission of volatile organic
 compounds from building products and furnishing –
 Emission test chamber method

ISO 16000-11 Indoor air –
2006-06 Part 11: Determination of the emission of volatile organic
 compounds from building products and furnishing –
 Sampling, storage of samples and preparation of test
 specimens

8 Determination of the odor characteristics of materials

VDA 270 2018-06	Determination of the odour characteristics of trim materials in motor vehicles
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Abbreviations used:

CEM	Continuous Emission Monitoring
CEN/TS	Comité Européen de Normalisation/Technical Specification
DIN	Deutsches Institut für Normung e. V.
EN	European Normative
GOAA	<i>Guideline on Odour in Ambient Air</i> (Geruchsimmissions-Richtlinie GIRL)
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
M-xxxx	In house method of the Olfasense GmbH
P-xxxx	In house method of the Olfasense GmbH
SRM	Standard Reference Method
TA	Technical Instructions
VDI	Verein Deutscher Ingenieure