

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-19722-01-00 according to DIN EN ISO/IEC 17025:2005

Indefinite since: 23.11.2018

Date of issue: 14.09.2018

Holder of certificate:

**Institut für Lacke und Farben Magdeburg gGmbH
Fichtestraße 29, 39112 Magdeburg**

Tests in the fields:

chemical-analytical analysis of substances such as inorganic and organic chemicals, pigments, dyestuffs, oil, fats, waxes, resins, emulsifiers, additives, surface active agents, polymeric and coating materials;
testing of the decontamination of polymeric materials, particularly determination of coatings;
chemical analysis of tools, semi-finished products, components and assembly groups in the interior of automobiles (emission analysis)

Within the scope of accreditation marked with *, 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.

Within the given testing field marked with **, the testing laboratory is permitted, without being required to inform and obtain prior approval from DAkkS, the following the free choice of standard or equivalent testing methods. The listed testing methods are exemplary.
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 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>*

Annex to the Accreditation Certificate D-PL-19722-01-00

1 Chemical analytical tests

1.1 Physical-chemical analysis methods *

DIN EN ISO 2811-1 2016-08	Paints and varnishes - Determination of density - Part 1: Pycnometer method
DIN EN ISO 3251 2008-06	Paints, varnishes and plastics - Determination of non-volatile-matter content
DIN EN ISO 11890-1 2007-09	Paints and varnishes - Determination of volatile organic compound (VOC) content - Part 1: Difference method

1.2 Gas chromatographic analysis methods *

DIN EN ISO 11890-2 2013-07	Paints and varnishes - Determination of volatile organic compound (VOC) content - Part 2: Gas-chromatographic method
DIN EN ISO 17895 2005-06	Paints and varnishes - Determination of the volatile organic compound content of low-VOC emulsion paints (in-can VOC)

1.3 Spectroscopic analysis methods *

DIN EN 1767 1999-09	Products and systems for the protection and repair of concrete structures - Test methods - Infrared analysis
VdL-RL 03 2018-02	Guideline for the determination of the formaldehyde concentration in waterborne coating materials and polymer dispersions (here: <i>In-can concentration of formaldehyde determined by the acetyl-acetone method</i>)

2 Testing the ease of decontamination *

DIN 25415 2012-11	Radioactively contaminated surfaces - Method for testing and assessing the ease of decontamination
ISO 8690 1988-08	Decontamination of radioactively contaminated surfaces - Method for testing and assessing the ease of decontamination

3 Emission analysis

3.1 Determination of the fogging characteristics using Fogging Apparatus **

BSDM0503 2014-04	Fogging test method for non-metallic materials
DIN 75201 2011-11	Determination of the fogging characteristics of trim materials in the interior of automobiles
GMW3235 2016-08	Fogging characteristics of trim materials
ISO 6452 2007-06	Rubber- or plastics-coated fabrics - Determination of fogging characteristics of trim materials in the interior of automobiles
PV 3015 1994-05	Non-Metallic Materials for Interior Trim - Determining Condensable Constituents (G)
Renault D45 1727 / - - G 2012-12	Interior trim materials and passenger compartment parts - Fogging
SAE J 1756 2006-08	Determination of the fogging characteristics of interior automotive materials
TSM0503G 2014-04	Fogging test method for non-metallic materials (here: <i>method B</i>)
VCS 1027,2719 2004-01	Organic materials - Fogging

3.2 Determination of odor characteristics using sensory analysis **

BSDM0505 2015-04	Smell quality of non-metallic materials
FLTM BO 131-03 2017-05	Interior odor test
GMW3205 2016-08	Test method for determining the resistance to odor propagation of interior materials

Annex to the Accreditation Certificate D-PL-19722-01-00

PV 3900 2000-08 Renault D49 3001 / - - E 2015-01	Components in Passenger Compartment - Odor Test Odour emissions, internal equipment parts - Intensity evaluation and global odour characterization
TPJLR.52.458 2014-05	Determination and assessment of odour from interior trim materials, components and assemblies
TSM0505G 2013-05	Smell quality of non-metallic materials
VCS 1027,2729 2016-11	Organic materials - Odour of trim materials in vehicles
VDA 270 2016-11	Determination of the odour characteristics of trim materials in motor vehicles

3.3 Determination of Formaldehyde using photometry**

AA-0061 2014-02	Formaldehyde emission from non-metallic materials and components, determined by HPLC (here: <i>without sample analysis</i>)
FLTM BZ 156-01 2011-07	Determination of formaldehyde, aldehyde, and ketone emissions from non-metallic components, parts and materials in the vehicle interior (here: <i>only method A</i>)
PV 3925 2009-06	Polymer Materials - Measuring Emissions of Formaldehyde
Renault D40 3004 / - - A 2011-07	Analysis of formaldehyde and other carbonyl compounds (here: <i>without testing sample</i>)
VCS 1027,2739 2004-03	Determination of formaldehyde emission from components in vehicle interiors
VDA 275 1994-07	Moulded composites and fleeces for vehicles - Determination of formaldehyde release - Test procedure called modified flask method

Annex to the Accreditation Certificate D-PL-19722-01-00

3.4 Determination of the emission of Aldehyde and Ketone using HPLC **

AA-0061 2014-02	Formaldehyde emission from non-metallic materials and components, determined by HPLC (here: <i>without sample analysis</i>)
DIN ISO 16000-3 2013-01	Indoor air - Part 3: Determination of formaldehyde and other carbonyl compounds in indoor air and test chamber air - Active sampling method (here: <i>without sample analysis</i>)
FLTM BZ 156-01 2011-07	Determination of formaldehyde, aldehyde, and ketone emissions from non-metallic components, parts and materials in the vehicle interior (here: <i>only method B</i>)
GMW15635 2017-01	Determination of aldehyde and ketone emissions from interior materials
Renault D40 3004 / - - A 2011-07	Analysis of formaldehyde and other carbonyl compounds (here: <i>without sample analysis</i>)
VDI 3862 Blatt 3 2000-12	Gaseous emission measurement - Measurement of aliphatic and aromatic aldehydes and ketones by DNPH method - Cartridges method (here: <i>without sample analysis</i>)

3.5 Determination of volatile organic compounds by gas chromatography using standard-detection (FID) and mass selective detection (MSD) **

DIN ISO 16000-6 2012-11	Indoor air - Part 6: Determination of volatile organic compounds in indoor and test chamber air by active sampling on Tenax TA [®] sorbent, thermal desorption and gas chromatography using MS or MS-FID (here: <i>without sample analysis</i>)
FLTM BZ 157-01 2011-03	Determination of organic emissions from non-metallic materials in vehicle interiors by Headspace Gas Chromatography
PSA D10 5495	Test for interior materials vehicle - Evaluation of the amount of volatile organic compounds (VOCs) by thermodesorptions/GS/MS

Annex to the Accreditation Certificate D-PL-19722-01-00

<p>PV 3341 1995-03 Renault D42 3109 / - - B 2011-10</p>	<p>Non-metallic materials of automotive interiors - Determination of the emission of organic compound Vehicle passenger compartment materials evaluation of the Quantity of volatile organic compounds (VOC) by thermal desorption/GC/MS (FID)</p>
<p>VCS 1027,2749 2004-03</p>	<p>Determination of organic emission from non-metallic materials in vehicle interiors</p>
<p>VDA 277 1995-01</p>	<p>Determination of organic emission of non-metallic materials from vehicle interior</p>
<p>VDA 278 2011-09</p>	<p>Thermal desorption analysis of organic emissions for the characterization of non-metallic materials for automobiles</p>
<p>VW 96424 2017-04</p>	<p>Interieur - Emissionsverhalten - Thermodesorptionsanalyse in Anlehnung an VDA 278</p>

abbreviations used:

AA	Working instruction of BMW AG
BMW	Bayerische Motoren Werke AG
BSDM	Toyota Boshoku Technical Standard
DIN	German Institute for Standardization
EN	European Standard
FLTM	Ford Laboratory Test Method
GMW	General Motors Worldwide Engineering Standard
ISO	International Organization for Standardization
PSA	Peugeot Société Anonyme
PV	Volkswagen AG - Test Specification
RL	Guidance Document
SAE	Society of Automotive Engineers
TPJLR	Jaguar Cars & Land Rover - Engineering Test Procedure
TSM	Toyota Engineering Standard
VCS	Volvo Car Corporation Standard
VDA	German Association of the Automotive Industry
VDI	Association of German Engineers
VdL	German Paint and Printing Ink Association
VW	Volkswagen AG