

Deutsche Akkreditierungsstelle GmbH

Annex to the Accreditation Certificate D-PL-14298-01-00 according to DIN EN ISO/IEC 17025:2005

Period of validity: 26.07.2016 to 03.12.2020

Date of issue: 26.07.2016

Holder of certificate:

**ProChem GmbH Emissionsmessungen Spezialanalytik chemisch-technische Beratung
Daimlerring 37, 31135 Hildesheim**

Tests in the fields:

**physical, physico-chemical and chemical analyses of water, soils, sludges, waste, materials for recycling, chemicals, gases, dusts and gas accumulations;
determination of aerosols of inorganic and organic gases and vapors and of selected parameters for workplace measurements according to the Ordinance on Hazardous Substances Section 7, para. 10;
determination of emissions:
determination of inorganic and organic gaseous and particulate air constituents;
special sampling of substances that require a special care in sampling (PCDD / PCDF and dioxin-like PCBs);
calibrations and function tests of continuously operating emission measuring equipment for inorganic and organic gaseous or particulate air constituents;
Immission Protection Module**

Abbreviations used: see last page

The test laboratory is allowed to use the standardized test methods listed here or methods equivalent to them, with different issue status without requiring prior information and consent of the national accreditation body for the Federal Republic of Germany (DAkkS).

Within the test areas denoted by an asterisk (), the testing laboratory is allowed a free choice of standard or test methods equivalent to them, without any prior information and consent of the national accreditation body for the Federal Republic of Germany (DAkkS).*

*Within the test areas denoted by two asterisks (**), the testing laboratory may modify and improve test methods as well as develop new test methods without notifying or obtaining the consent of the national accreditation body for the Federal Republic of Germany (DAkkS).*

The test methods listed are illustrative. The testing laboratory has a current list of all test methods in the flexible accreditation area.

Annex to the accreditation certificate D-PL-14298-01-00

1 Water

1.1 Physical and physico-chemical parameters

DIN EN ISO 10523 (C 5) Water quality - Determination of pH
2012-04

DIN EN 27888 (C 8) Water quality; determination of electrical conductivity
1993-11

1.2 Parameters characterizing effects and substances

DIN 38409-H 2 Determination of filterable matter and the residue on ignition
1987-03

DIN EN 872 (H 33) Water quality - Determination of suspended solids - Method by
2005-04 filtration through glass fiber filters

1.3 Photometric measurement of anions and cations *

DIN 38406-E 5 Determination of ammonia-nitrogen
1983-10

DIN 38405-D 14 Determination of cyanides drinking water, slightly contaminated
1988-12 ground and surface water
(*withdrawn standard*)

DIN 38405-D 24 Photometric determination of chromium(VI) using
1987-05 1,5-diphenylcarbonohydrazide

1.4 Determination of anions by chromatography of ions *

DIN EN ISO 10304-1 (D 20) Water quality - Determination of dissolved anions by liquid
2009-07 chromatography of ions - Part 1: Determination of bromide, chloride,
fluoride, nitrate, nitrite, phosphate and sulfate

DIN EN ISO 10304-3 (D 22) Water quality - Determination of dissolved anions by liquid
1997-11 chromatography of ions - Part 3: Determination of chromate, iodide,
sulfite, thiocyanate and thiosulfate

1.5 Determination of organic parameters by means of gas chromatography (GC-FID, GC-ECD, GC-MSD) **

DIN EN ISO 6468 (F 1) Water quality - Determination of certain organochlorine insecticides,
1997-02 polychlorinated biphenyls and chlorobenzenes - Gas-chromatographic
method after liquid-liquid extraction

Annex to the accreditation certificate D-PL-14298-01-00

DIN 38407-F 3 1998-07	Determination of polychlorinated biphenyls using gas chromatography
DIN EN ISO 10695 (F 6) 2000-11	Water quality - Determination of selected organic nitrogen and phosphorus compounds - Gas chromatographic methods
DIN EN ISO 17353 (F 13) 2005-11	Water quality - Determination of selected organotin compounds - Gas chromatographic method
DIN EN 12673 (F 15) 1999-05	Water quality - Gas chromatographic determination of selected chlorophenols in water
DIN 38407-F 16 1999-06	Determination of aniline derivates by gas chromatography <i>(Variation: Extraction with MTBE)</i>
DIN 38407-F 17 1999-02	Determination of selected nitroaromatic compounds by gas-liquid chromatography
DIN EN ISO 15913 (F 20) 2003-05	Water quality - Determination of selected phenoxyalkanoic herbicides, including bentazones and hydroxybenzonitriles by gas chromatography and mass spectrometry after solid phase extraction and derivatization
DIN EN 12918 (F 24) 1999-11	Water quality - Determination of parathion, parathion-methyl and some other organophosphorus compounds in water by dichloromethane extraction and gas chromatographic analysis
DIN EN ISO 23631 (F 25) 2006-05	Water quality - Determination of dalapon, trichloroacetic acid and selected haloacetic acids - Method using gas chromatography (GC-ECD and/or GC-MS detection) after liquid-liquid extraction and derivatization
DIN EN ISO 18856 (F 26) 2005-11	Water quality - Determination of selected phthalates using gas chromatography/mass spectrometry
DIN EN ISO 18857-2 (F 32) 2012-01	Water quality - Determination of selected alkylphenols - Part 2: Gas chromatographic-mass spectrometric determination of alkylphenols, their ethoxylates and bisphenol A in non-filtered samples following solid-phase extraction and derivatization

Annex to the accreditation certificate D-PL-14298-01-00

DIN 38407-F 43 2014-10	Determination of selected high-volatility organic compounds in water - Method using gas chromatography and mass spectrometry by static headspace technique (HS-GC-MS)
DIN EN ISO 9377-2 (H 53) 2001-07	Water quality - Determination of hydrocarbon oil index - Part 2: Method using solvent extraction and gas chromatography
QMA-504-014 2015-02	Determination of solvent in water by headspace GC/MS
QMA-504-064 2009-07	Determination of glycols and glycol ethers in water and liquids containing alcohol with GC / MS coupling
QMA-504-067 2015-02	Determining mercury organic compounds in water by headspace GC/MS coupling after derivatization with sodium tetraethylborate
QMA-504-091 2012-03	Determination of pyrethroids (permethrin, cypermethrin, cyfluthrin, deltamethrin, among others) in water by GC/MS coupling
QMA-504-094 2005-06	Identification and semi-quantitative determination of semi-volatile and low-volatility organic compounds in water by GC / MS
QMA-504-112 2006-06	Identification and semi-quantitative determination of highly-volatile and semi-volatile organic compounds in water by headspace GC/MS
QMA-504-117 2005-06	Determination of hydrazine in water by GC/MS coupling after derivatization with pentafluorobenzaldehyde
QMA-504-125 2012-01	Determination of various NSO heterocycles in water by GC/MS coupling after liquid/liquid extraction
QMA-504-130 2010-07	Determination of formamides in water and other liquids with GC/MS coupling
QMA-504-131 2015-02	Determination of higher alcohols in water by GC/MS coupling after liquid-liquid extraction
QMA-504-132 2011-05	Determination of mercaptans and sulfates in water with HS-GC/MS coupling
QMA-504-134 2015-07	Determination of tertiary aliphatic amines in water with headspace GC/MS coupling
QMA-504-183 2015-02	Determination of high-volatility hydrocarbons (C1 to C6) in water with headspace GC/FID

1.6 Determination of organic parameters by means of HPLC (HPLC-UVD, HPLC-DAD, HPLC-FLD) **

DIN EN ISO 11369 (F 12) 1997-11	Water quality - Determination of selected plant treatment agents - Method using high performance liquid chromatography with UV detection after solid-liquid extraction
DIN EN ISO 17993 (F 18) 2004-03	Water quality - Determination of 15 polycyclic aromatic hydrocarbons (PAH) in water by HPLC with fluorescence detection after liquid-liquid extraction
DIN EN ISO 22478 (F 21) 2006-07	Water quality - Determination of certain explosives and related compounds - Method using high-performance liquid chromatography (HPLC) with UV detection
QMA-504-046 2005-04	Determination of selected aliphatic carboxylic acids in water with HPLC/DAD
QMA-504-123 2012-04	Determination of primary and secondary aliphatic amines in water and aqueous solutions enrichment by HPLC/FLD/UV

1.7 Determination of organic parameters, and perchlorate, chlorate and bromate by HPLC-MS **

QMA-504-150 2015-01	Determination of LAS (linear alkyl benzenesulfonates) in water after enrichment by solid-liquid extraction (SPE) by HPLC/MS
QMA-504-152 2015-03	Determination of perchlorate, chlorate and bromate in water with HPLC/MS
QMA-504-157 2015-02	Determination of nitrophenols, DNOC, this active, dinoseb, picric acid, picramic, trinitroresorcinol in water, effluents and aqueous solutions with HPLC/MS
QMA-504-160 2015-02	Determination of hexanitrostilbene in water, effluents and aqueous solutions with HPLC/MS
QMA-504-165 2015-03	Determination of carbamazepine, sulfamethoxazole and antipyrine in water samples by HPLC/MS
QMA-504-168 2015-02	Determination of selected explosives (DINIS, Tetryl, PETN, HMX, RDX) in water, effluents and aqueous solutions with HPLC/MS
QMA-504-179 2015-03	Determination of selected neutral PBSM in water and aqueous solutions with HPLC/MS

1.8 Determination of elements by AAS (GF-AAS, ET-AAS, CV-AAS) *

DIN EN ISO 7980 (E 3a) 2000-07	Water quality - Determination of calcium and magnesium - Atomic absorption spectrometric method
DIN EN ISO 15586 (E 4) 2004-02	Water quality - Determination of trace elements by atomic absorption spectrometry with graphite furnace.
DIN 38406-E 6 1998-07	Determination of lead by atomic absorption spectrometry (AAS)
DIN 38406-E 7 1991-09	Determination of copper by atomic absorption spectrometry (AAS)
DIN 38406-E 8 2004-10	Determination of zinc - Method by atomic absorption spectrometry (AAS) using an air-ethine flame
DIN EN 1233 (E 10) 1996-08	Water quality - Determination of chromium - Atomic absorption spectrometric method
DIN 38406-E 11 1991-09	Determination of nickel by atomic absorption spectrometry (AAS)
DIN EN ISO 12846 (E 12) 2012-08	Water quality - Determination of mercury - Method using atomic absorption spectrometry (AAS) with and without enrichment
DIN 38406-E 13 1992-07	Determination of potassium by atomic absorption spectrometry (AAS) using an air-acetylene flame
DIN 38406-E 14 1992-07	Determination of sodium by atomic absorption spectrometry (ASS) using an air-acetylene flame
DIN EN ISO 5961 (E 19) 1995-05	Determination of cadmium by atomic absorption spectrometry <i>(Variation: also for tin)</i>
DIN 38406-E 24 1993-03	Determination of cobalt by atomic absorption spectrometry (AAS)
DIN EN ISO 12020 (E 25) 2000-05	Water quality – Determination of aluminum - Atomic absorption spectrometric methods
DIN 38406-E 32 2000-05	Determination of iron by atomic absorption spectrometry
DIN 38406-E 33 2000-06	Determination of manganese by atomic absorption spectrometry

Annex to the accreditation certificate D-PL-14298-01-00

2 Soil, sludge, waste and recycling materials

2.1 Sample preparation

DIN EN 16174
2012-11 Sludge, treated biowaste and soil - Digestion of aqua regia soluble fractions of elements

2.2 Physical, physicochemical parameters

ISO 10390
2005-02 Soil quality - Determination of pH

DIN EN 15934
2012-11 Sludge, treated biowaste, soil and waste - Calculation of dry matter fraction after determination of dry residue or water content

DIN EN 15935
2012-11 Sludge, treated biowaste, soil and waste - Determination of loss on ignition

DIN EN 12879 (S 3a)
2001-02 Characterization of sludges - Determination of the loss on ignition of dry mass

2.3 Determination of organic parameters by means of gas chromatography (GC-FID, GC-ECD, GC-MSD) **

DIN EN ISO 16703
2011-09 Soil quality - Gas-chromatographic method for determining the levels of hydrocarbons from C10 to C40

DIN EN 14039
2005-01 Soil quality - Determination of content of hydrocarbon in the range C10 to C40 by gas chromatography

DIN 38407-F 16
1999-06 Determination of aniline derivates by gas chromatography (*Variation: here for soil after extraction with acetonitrile*)

DIN 38407-F 17
1999-02 Determination of selected nitroaromatic compounds by gas-liquid chromatography
(*Variation: here for soil*)

DIN EN ISO 15913 (F 20)
2003-05 Water quality - Determination of selected phenoxyalkanoic herbicides, including bentazones and hydroxybenzotrioles by gas chromatography and mass spectrometry after solid phase extraction and derivatization
(*Variation: here for soil, acidic extraction with methanol*)

DIN EN ISO 18856 (F 26)
2005-11 Water quality - Determination of selected phthalates using gas chromatography/mass spectrometry
(*Variation: here for soil*)

Annex to the accreditation certificate D-PL-14298-01-00

DIN EN ISO 22155 2013-05	Soil quality - Gas chromatographic determination of volatile aromatic and halogenated hydrocarbons and selected ethers - Static headspace method
DIN ISO 10382 2003-05	Soil quality - Determination of organochlorine pesticides and polychlorinated biphenyls - Gas-chromatographic method with electron capture detection <i>(Variation: here detection with GC/MS)</i>
DIN ISO 14154 2005-12	Soil quality - Determination of some selected chlorophenols - Gas-chromatographic method with electron-capture detection <i>(Variation: here detection with GC/MS)</i>
QMA-504-006 2010-07	Determination of glycogen, glycol ethers and higher alcohols in soils and solids with GC/MS coupling
QMA-504-013 2015-02	Determination of solvents in soil by headspace GC/MS
QMA-504-066 2015-02	Determination of methylmercury in soil by headspace SPME-GC/MS after derivatization with sodium tetraethylborate
QMA-504-068 2011-08	Determination of PCP/lindane and other wood preservatives in wood and house dust samples by GC/MS coupling
QMA-504-090 2005-05	Determination of pyrethroids (permethrin, cypermethrin, cyfluthrin, deltamethrin, among others) in soil by GC/MS coupling
QMA-504-093 2005-06	Identification and semi-quantitative determination of trace organic compounds in soil by GC/MS after extraction
QMA-504-094 2005-06	Identification and semi-quantitative determination of semi-volatile and low-volatility organic compounds in water by GC/MS
QMA-504-099 2005-06	Identification and semi-quantitative determination of highly volatile and semi-volatile organic compounds in soil by headspace GC/MS
QMA-504-148 2015-03	Determination of tertiary aliphatic amines in soils and solids with headspace GC/MS

2.4 Determination of PCB by GC/MS

DIN 38414-S 20 1996-01	Sludge and sediments (group S) - Part 20: Determination of 6 polychlorinated biphenyls (PCB)
---------------------------	--

Annex to the accreditation certificate D-PL-14298-01-00

DIN EN 15308
2008-05 Characterization of waste - Determination of selected polychlorinated biphenyls (PCB) in solid waste by gas chromatography with electron capture or mass spectrometric detection

2.5 Determination of organic parameters by means of HPLC with standard detectors (HPLC-UVD, HPLC-DAD, HPLC-FLD) **

DIN ISO 11264
2005-11 Soil quality - Determination of herbicides - Method using HPLC with UV-detection

DIN EN ISO 22478
2006-07 Water quality - Determination of certain explosives and related compounds - Method using high-performance liquid chromatography (HPLC) with UV detection
(Variation: here for soil, waste and sludge after extraction with acetonitrile)

Contaminated Soil Manual Vol. 7 (Handbuch Altlasten, Bd. 7), Part 1 Hessian Agency for Nature Conservation, Environment and Geology (HLUG) 1998 Determination of polycyclic aromatic hydrocarbons in solids from contaminated soil
(Variation: Extraction with ACN)

Bulletin 1, Environmental Agency of North-Rhine Westphalia 1994 Determination of polycyclic aromatic hydrocarbons in soil samples

QMA-504-184
2015-03 Determination of primary and secondary aliphatic amines in soil and solids by HPLC/FLD/UV

2.6 Determination of organic parameters, and perchlorate, chlorate and bromate by HPLC/MS **

DIN CEN/TS 16189; DIN SPEC 91263 2012-05	Sludge, treated biowaste and soil - Determination of linear alkylbenzene sulfonates (LAS) by high-performance liquid chromatography (HPLC) with fluorescence detection (FLD) or mass selective detection (MS)
QMA-504-153 2015-03	Determination of perchlorate, chlorate and bromate in soils, sludge and other solids with HPLC/MS
QMA-504-158 2015-03	Determination of nitrophenols, DNOC, this active, dinoseb, picric acid, picramic, trinitroresorcinol in soil and solids with HPLC/MS
QMA-504-159 2015-03	Determination of hexanitrostilbene in soil and solids with HPLC/ MS
QMA-504-169 2015-03	Determination of selected explosives (DINIS, Tetryl, PETN) in soil and solids with HPLC/MS

2.7 Determination of elements by AAS (GF-AAS, ET-AAS, CV-AAS) *

DIN 38406-E 26 1997-07	Determination of thallium by atomic absorption spectrometry (AAS) using electrothermal atomization <i>(Variation: here for soil)</i>
DIN ISO 11047 2003-05	Soil quality - Determination of cadmium, chromium, cobalt, copper, lead, manganese, nickel and zinc in aqua regia extracts of soil - Flame and electrothermal atomic absorption spectrometric methods
DIN ISO 16772 2005-06	Soil quality - Determination of mercury in aqua regia soil extracts with cold-vapor atomic spectrometry or cold-vapor atomic fluorescence spectrometry
DIN ISO 20280 2010-05	Soil quality - Determination of arsenic, antimony and selenium in aqua regia soil extracts with electrothermal or hydride-generation atomic absorption spectrometry <i>(here only electrothermal AAS)</i>

3 Chemical Products

3.1 Determination of elements by Wickbold digestion followed by ion chromatography **

DIN 53474 1998-06	Testing of plastics, rubber and elastomers - Determination of the chlorine content (Wickbold digestion) <i>(withdrawn standard)</i> <i>(Variation: here for chlorine and bromine)</i>
DIN EN 24260 1994-05	Petroleum products and hydrocarbons - Determination of sulfur content - Wickbold combustion method <i>(withdrawn standard)</i>
QMA-504-107 2014-12	Determination of sulfur in solids after Wickbold digestion and ion chromatography

3.2 Determination of organic parameters by means of gas chromatography (GC-FID, GC-MSD) **

QMA-504-118 2015-03	Determination of PBSM content in solvent-borne formulations with GC/FID
QMA-504-154 2015-03	Determination of glycols in fog fluid with GC/FID
QMA-504-171 2015-02	Determination of metaldehyde in slug pellets with GC/FID
QMA-504-064 2009-07	Determination of glycols and glycol ethers in water and liquids containing alcohol with GC / MS coupling
QMA-504-164 2015-03	Identification and semi-quantitative determination of extractables by GC/MS coupling in aqueous and ethanolic extracts

3.3 Determination of organic parameters by means of HPLC (HPLC-DAD, HPLC-FLD) **

QMA-504-155 2015-02	Determination of warfarin (difenacoum, brodifacoum) in food baits with HPLC/DAD
QMA-504-186 2015-01	Determination of benzotriazole and methylbenzotriazole in glycolic deicing and chemical baths with HPLC / DAD

3.4 Determination of organic parameters by means of HPLC/MS **

QMA-504-163 2015-03	Identification and semi-quantitative determination of extractables by HPLC/MS coupling in aqueous and ethanolic extracts
QMA-504-185 2015-07	Determination of extractable azodicarbonamide in foamed plastics with HPLC/MS

3.5 Determination of elements by AAS (F-AAS, ET-AAS) **

QMA-504-054 2005-04	Determination of platinum in organic bases with AAS after dry ashing
QMA-504-116 2005-04	Determination of nickel in organic bases with flame AAS after dry ashing

4 Gases, dusts and gas enrichments

4.1 Titrimetric methods

VDI 3481 Sheet 2 1998-09	Gaseous emission measurement - Determination of gaseous organic carbon in waste gases - Adsorption on silica gel
VDI 3486 Sheet 2 1979-04	Measurement of gaseous emission; Measurement of the hydrogen sulfide concentration; Iodometric titration method

4.2 Photometric methods

VDI 2454 Sheet 2 1982-03	Gaseous air pollution measurement; measurement of hydrogen sulphide concentration; methylene blue Impinger method
VDI 3496 Sheet 1 1982-04	Gaseous emission measurement; determination of basic nitrogen compounds seizable by absorption in sulphuric acid
VDI 3862 Sheet 4 2001-05	Gaseous emission measurement - Measurement of formaldehyde by the AHMT method
VDI 3862 Sheet 6 2004-02	Gaseous emission measurement - Measurement of formaldehyde by the acetylacetone method
IFA 6665 2014-10	Chromium(IV) compounds
IFA 6725 2012-11	Hydrogen cyanide (HCN) and cyanide (CN)

4.3 Determination of organic and inorganic substances in the air by ion chromatography **

DIN EN 1911 2010-12	Stationary source emissions - Determination of mass concentration of gaseous chlorides expressed as HCl
IFA 6172 2007-04	Inorganic acids, volatile: Hydrogen bromide, hydrogen chloride, nitric acid
IFA 6173 2010-12	Inorganic acids, particulate: Phosphoric acid and sulfuric acid
IFA 7512 2006-05	Fluorides and hydrogen fluoride
QMA-507-065 2014-06	Digestion according to Wickbold for determining the organically bound chlorine and fluorine in landfill gas detectable by adsorption on activated carbon
QMA-507-068 2014-06	Digestion according to Wickbold for determining the organically bound sulfur in landfill gas detectable by adsorption on silica gel

4.4 Determination of organic and inorganic parameters by means of gas chromatography (GC-FID, GC-WLD, GC-NCD, GC-ECD, GC-MSD) **

DIN EN 13649 2002-05	Emissions from stationary sources - determination of mass concentrations in individual gaseous organic compounds - active charcoal adsorption and solvent desorption procedure <i>(withdrawn standard)</i>
DFG Method No. 2 1983-09	Phenol and cresol
IFA 8172 2011-05	N-nitrosamines, aliphatic and cycloaliphatic
IFA 6600 2006-10	High-volatility halogenated hydrocarbons
IFA 7732 2011-10	Hydrocarbons, aliphatic <i>(Deviation: elution with DMF and measurement with HS-GC/MS)</i>
VDI 2464 Sheet 1 2009-09	Measurement of immissions - Indoor air measurement - Measurement of polychlorinated biphenyls (PCBs) - GC/MS method for PCB 28, 52, 101, 138, 153, 180

Annex to the accreditation certificate D-PL-14298-01-00

VDI 3874 2006-12	Measurement of emissions - Measurement of polycyclic aromatic hydrocarbons (PAH) - GC/MC method
along the lines of VDI 4301 Sheet 2 2000-06	Indoor air pollution measurement - Measurement of pentachlorophenol (PCP) and γ -hexachlorocyclohexane (lindane) - GC/MS-method
QMA-504-003 2013-05	Determination of aromatic hydrocarbons, low-volatility halocarbons and VC in air by headspace GC/MS
QMA-504-010 2014-12	Determination of BTEX aromatic compounds, C3-aromatics and styrenes in air samples by GC-MS after solvent desorption
QMA-504-011 2013-08	Determining the presence of perchlorethylene and other highly volatile organic compounds in air samples using gas chromatography after desorption with carbon disulfide
QMA-504-012 2014-09	Determination of solvents (alcohols, ketones, esters) in air by headspace GC/MS
QMA-504-015 2012-01	Determination of organic silicon compounds in landfill gas by GC/MS
QMA-504-133 2014-03	Determination of mercaptans in the air after enrichment on filter with HS-GC/MS coupling
QMA-504-138 2015-02	Determination of low hydrocarbons (C1-C6) in air by GC/FID
QMA-504-141 2010-09	Determination of hydrogen in gases with GC/TCD
QMA-504-147 2015-05	Determination of glycogen and glycol ethers in air samples by GC/MS
QMA-504-149 2015-02	Determination of tertiary aliphatic amines in air and air enrichment with headspace GC/MS coupling
QMA-507-024 2004-12	Determination of gases with GC/MS coupling - Direct injection of gas samples
QMA-507-053 2013-07	Determination of permanent gases in air and gas samples with GC/TCD
QMA-507-070 2005-11	Determination of carbon monoxide with GC/MS coupling - Direct injection of gas samples - Reference method

4.5 Determination of organic parameters using HPLC (HPLC-UVD, HPLC-DAD, HPLC-FLD) **

VDI 3862 Sheet 2 2000-12	Gaseous emission measurement - Measurement of aliphatic and aromatic aldehyde and ketones by DNPH method - Impinger method
VDI 3862 Sheet 3 2000-12	Gaseous emission measurement - Measurement of aliphatic and aromatic aldehydes and ketones by DNPH method - Cartridge method
IFA 6045 2007-11	Aldehydes
QMA-507-033 2011-02	Determination of diisocyanates in air by derivatization with 1-(2-pyridyl) piperazine using HPLC/DAD/FLD

4.6 Determination of organic parameters by means of HPLC/MS **

QMA-504-156 2015-03	Enriched determination of azodicarbonamide in dust and air samples on filters with HPLC/MS
QMA-504-170 2015-03	Determination of melamine and melamine cyanurate in dusts and filter samples using HPLC/MS

4.7 Determination of metals by AAS (F-AAS, ET-AAS, CV-AAS) *

DIN EN 13211 2001-06	Air quality - Stationary source emissions - Manual method of determination of the concentration of total mercury
DIN EN 14385 2004-05	Stationary source emissions - Determination of the total emission of As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, Tl and V
IFA 6060 2003-10	Aluminum (alveolar dust)
IFA 6175 1990-10	Antimony
IFA 6195 2014-04	Arsenic
IFA 6310 1989-06	Lead
IFA 6645 2001-10	Chromium

Annex to the accreditation certificate D-PL-14298-01-00

IFA 7755 2003-10	Copper
IFA 7757 2003-10	Copper smoke (alveolar dust)
IFA 8095 2014-10	Nickel
IFA 8588 1990-10	Selenium
QMA-507-210 2015-04	Determination of the metals aluminum, arsenic, cadmium, cesium, cobalt, chromium, copper, manganese, nickel, lead, antimony, zinc, selenium and tin in workplace air after digestion by AAS <i>(Here for cadmium, cesium, cobalt, manganese, zinc and tin based on IFA 8095)</i>

4.8 Sampling of fiber dusts in the scope of workplace measurements

IFA 7485 2009-05	Fibers, general
---------------------	-----------------

**5 Determination of hazardous substances in the workplace atmosphere
 according to Hazardous Material Directive Section 7, para. 10, Groups 1 to 5**

Group 1 Aerosols (without fiber dusts)	Standard title	Standard	QM Document	Remark*/ Location
Components			VA /AA	
Alveolar dust	Alveolar fraction	IFA 6068 2015-05	QMA-507-202	
	Aluminum (alveolar dust)	IFA 6060 2003-10	QMA-507-202 (PN) QMA-507-210 (A)	
	Copper smoke (alveolar dust)	IFA 7757 2003-10	QMA-507-202 (PN) QMA-507-210 (A)	
Respirable dust	Respirable fraction	IFA 7284 2003-10	QMA-507-201	
Wood dust	Wood dust	IFA 7630 2011-11	QMA 597-201 (PN) QMA-507-210 (A)	
Metals and metal compounds incl. chromium(VI)	Aluminum	IFA 7284 2003-10 IFA 6060 2003-10	QMA-507-201 (PN) QMA-507-210 (A)	
	Antimony	IFA 6175 1990-10	QMA-507-201 (PN) QMA-507-210 (A)	
	Arsenic	IFA 6195 2014-04	QMA-507-201 (PN) QMA-507-210 (A)	
	Lead	IFA 6310 1989-06	QMA-507-201 (PN) QMA-507-210 (A)	
	Cadmium	<i>based on</i> IFA 8095 2014-10	QMA-507-201 (PN) QMA-507-210 (A)	
	Cesium	<i>based on</i> IFA 8095 2014-10	QMA-507-201 (PN) QMA-507-210 (A)	
	Chromium	IFA 6645 2001-10	QMA-507-201 (PN) QMA-507-210 (A)	
	Chromium(VI) compounds	IFA 6665 2014-10	QMA-507-201 (PN) QMA-507-018 (A)	
	Cobalt	<i>based on</i> IFA 8095 2014-10	QMA-507-201 (PN) QMA-507-210 (A)	
	Copper	IFA 7755 2003-10	QMA-507-201 (PN) QMA-507-210 (A)	
	Manganese	<i>based on</i> IFA 8095 2014-10	QMA-507-201 (PN) QMA-507-210 (A)	
	Nickel	IFA 8095 2014-10	QMA-507-201 (PN) QMA-507-210 (A)	
	Selenium	IFA 8588 1990-10	QMA-507-201 (PN) QMA-507-210 (A)	
Zinc	<i>based on</i>	QMA-507-201 (PN)		

Annex to the accreditation certificate D-PL-14298-01-00

Group 1 Aerosols (without fiber dusts)	Standard title	Standard	QM Document	Remark*/ Location
Components			VA /AA	
		IFA 8095 2014-10	QMA-507-210 (A)	
	Tin	<i>based on</i> IFA 8095 2014-10	QMA-507-201 (PN) QMA-507-210 (A)	

Group 3 Inorganic gases and vapors	Standard title	Standard	QM Document	Remark* Location
Components			VA /AA	
Hydrogen halides and other inorganic acids	Hydrogen bromide (HBr)	IFA 6172 2007-04	QMA-507-203 (PN) QMA-504-181 (A)	
	Hydrochloric acid (HCl)	IFA 6172 2007-04	QMA-507-203 (PN) QMA-504-181 (A)	
	Nitric acid (HNO ₃)	IFA 6172 2007-04	QMA-507-203 (PN) QMA-504-181 (A)	
	Hydrogen cyanide (HCN)	<i>based on:</i> IFA 6725 2012-11	QMA-507-203 (PN) QMA-504-180 (A)	
	Hydrofluoric acid (HF)	IFA 7512 2006-05	QMA-507-203 (PN) QMA-504-181 (A)	
	Phosphoric acid (H ₃ PO ₄)	IFA 6173 2010-12	QMA-507-204 (PN) QMA-504-181 (A)	
	Sulfuric acid (H ₂ SO ₄)	IFA 6173 2010-12	QMA-507-204 (PN) QMA-504-181 (A)	

Group 4 Organic gases and vapors	Standard title	Standard	QM Document	Remark* Location
Components			VA /AA	
Continuous measuring equipment	Solvents (continuously- registering measurement of solvent vapors)	IFA 9030 2013-04	QMA-507-012	
Basic solvents (Aliphatics, aromatics, high-volatility halogenated hydrocarbons, ketones, esters)	aliphatic hydrocarbons (pentane to decane)	IFA 7732 2011-11	QMA-507-205 (PN) QMA-504-146 (A)	HS-GC/MS
	aromatic hydrocarbons (BTEX)	IFA 6265 (benzene) 2013-10 IFA 7733 2005-04	QMA-507-205 (PN) QMA-504-003 (A)	HS-GC/MS

Annex to the accreditation certificate D-PL-14298-01-00

Group 4 Organic gases and vapors	Standard title	Standard	QM Document	Remark* Location
Components			VA /AA	
	aromatic hydrocarbons (BTEX, C ₃ aromatics)	IFA 6265 (benzene) 2013-10 IFA 7733 2005-04	QMA-507-205 (PN) QMA-504-010 (A)	GC/MS
	aromatic hydrocarbons (styrene, methyl styrene)	IFA 8635 2011-05	QMA-507-205 (PN) QMA-504-010 (A)	GC/MS
	high-volatility halogenated hydrocarbons (dichloromethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, tetrachloroethene)	IFA 6600 2006-10	QMA-507-205 (PN) QMA-504-003 (A)	HS-GC/MS
	high-volatility halogenated hydrocarbons (trichloroethene, tetrachloroethene)	IFA 6600 2006-10	QMA-507-205 (PN) QMA-504-011 (A)	GC/MS
	Ketones (acetone, MIBK, MEK, cyclohexanone)	IFA 7708 2005-04	QMA-507-205 (PN) QMA-504-012 (A)	HS-GC/MS
	Acetic ester	IFA 7322 2009-05	QMA-507-205 (PN) QMA-504-012 (A)	HS-GC/MS
Alcohols	Methanol	IFA 7810 2012-11	QMA-507-205 (PN) QMA-504-012 (A)	HS-GC/MS
	Ethanol	IFA 7330 1997-04	QMA-507-205 (PN) QMA-504-012 (A)	HS-GC/MS
	1-propanol	IFA 8414 1997-04	QMA-507-205 (PN) QMA-504-012 (A)	HS-GC/MS
	2-propanol	IFA 8415 1997-04	QMA-507-205 (PN) QMA-504-012 (A)	HS-GC/MS
	1-butanol	IFA 6385 1997-04	QMA-507-205 (PN) QMA-504-012 (A)	HS-GC/MS
	2-butanol	IFA 6386 1997-04	QMA-507-205 (PN) QMA-504-012 (A)	HS-GC/MS
	Isobutanol	IFA 6387 1997-04	QMA-507-205 (PN) QMA-504-012 (A)	HS-GC/MS

Group 4 Organic gases and vapors	Standard title	Standard	QM Document	Remark* Location
Components			VA /AA	
Aldehydes	Formaldehyde Acetaldehyde 2-propenal Propionaldehyde Butyraldehyde	IFA 6045 2007-11	QMA-507-205 (PN) QMA-507-001 (A)	HPLC/DAD
Phenols	Phenol o-cresol m-cresol p-cresol	DFG Method No.2 1983-09	QMA-507-205 (PN) QMA-507-055 (A)	GC/MS
Glycols and their derivatives	Glycols and glycol ethers	IFA 7345 2013-04 IFA 7569 2013-04	QMA-507-205 (PN) QMA-504-147 (A)	GC/MS

Group 5 Selected parameters	Standard title	Standard	QM Document	Remark* Location
Components			VA /AA	
Systems with two- phase sampling with total determination	Cooling lubricants	IFA 7750 2012-11	QMA-507-206 (PN)	only sampling
Multicomponent systems	N-nitrosamines, aliphatic and cycloaliphatic	IFA 8172 2011-05	QMA-507-209 (PN) QMA-504-178 (A)	
DME	Diesel engine emissions	IFA 7050 1997-04	QMA-507-202 (PN)	only sampling
Isocyanates	Diisocyanates, monomeric (2,4-TDI, 2,6-TDI, 2,4'-MDI, 4,4'-MDI, HDI, IPDI, NDI)	IFA 7120 2010-12	QMA-507-208 (PN) QMA-507-033 (A)	

6 Measuring procedure according to immission protection module and Appendix A2 of VDI 4220

Inspection / identification	Group I.1: Determination of emissions Task area G: Gaseous inorganic compounds				
	Components*	Standard / Directive / Technical rule Title		SRM	QM Document
Flow velocity /volume flow rate	Stationary source emissions - Manual and automatic determination of velocity and volume flow rate in ducts - Part 1: Manual reference method (ISO 16911-1:2013); German version EN ISO 16911-1:2013	DIN EN ISO 16911-1 2013-06	<input checked="" type="checkbox"/>	QMA-507-025	
SO ₂ continuous	Gaseous air pollution measurement; measurement of hydrogen sulphide concentration/Infrared absorption devices UNOR 6 and URAS 2	withdrawn VDI 2462 Sheet 4 1975-08	<input type="checkbox"/>	QMA-507-011	Type-approved NDIR analyzer Type: Ultramat 23 (Siemens)
SO ₂	Stationary source emissions - Determination of mass concentration of sulfur dioxide - Reference method	DIN EN 14791 2006-04	<input checked="" type="checkbox"/>	QMA-507-013 QMA-504-021	
NO _x continuous	Stationary source emissions - Determination of mass concentration of nitrogen oxides (NO _x) - Reference method: chemiluminescence	DIN EN 14792 2006-04	<input checked="" type="checkbox"/>	QMA-507-007	
NO _x	Measurement of gaseous emissions - Reference method for the determination of the sum of nitrogen monoxide and nitrogen dioxide - Ion chromatography method	VDI 2456 2004-11	<input checked="" type="checkbox"/>	QMA-507-009 QMA-504-021	
HCl	Stationary source emissions - Determination of mass concentration of gaseous chlorides expressed as HCl – Standard reference method	DIN EN 1911 2010-12	<input checked="" type="checkbox"/>	QMA-507-014 QMA-507-037	

Inspection / identification	Group I.1: Determination of emissions Task area G: Gaseous inorganic compounds					
	Components*	Standard / Directive / Technical rule Title		SRM	QM Document	Remark Location
			Designation			
NO _x continuous	Measurement of gaseous emissions; Measurement of nitric oxide; Infrared absorption devices URAS, UNOR, BECKMAN Model 315 in connection with: Measurement of gaseous emissions; Measurement of the amount of nitric oxide and nitrogen dioxide as nitric oxide using a converter	withdrawn VDI 2456 Sheet 3 1978-05 in connection with: withdrawn VDI 2456 Sheet 6 1978-05		QMA-507- 007	Type-approved NDIR analyzer Type: UNOR 6N (NO) (Maihak)	
CO continuous	Stationary source emissions - Determination of the mass concentration of carbon monoxide (CO) - Reference method: non- dispersive infrared spectrometry	DIN EN 15058 2006-09	<input checked="" type="checkbox"/>	QMA-507- 015		
CO	Gaseous emission measurement - Determination of carbon monoxide concentration using flame ionization detection after reduction to methane	VDI 2459 Sheet 1 2000-12		QMA-507- 070	Alternative method Reference method with GC/MS coupling - Direct injection of gas samples -	
HF	Gaseous emission measurement; measurement of gaseous fluorine compounds; absorption method	VDI 2470 Sheet 1 1975-10	<input checked="" type="checkbox"/>	QMA-507- 016 QMA-507- 037 QMA-507- 038		
NH ₃	Gaseous emission measurement; determination of basic nitrogen compounds seizable by absorption in sulphuric acid	VDI 3496 Sheet 1 1982-04	<input checked="" type="checkbox"/>	QMA-507- 079 QMA-507- 017		
H ₂ S	Measurement of gaseous emission; Measurement of the hydrogen sulfide concentration; Iodometric titration method	VDI 3486 Sheet 2 1979-04	<input checked="" type="checkbox"/>	QMA-507- 078 QMA-507- 031		

Annex to the accreditation certificate D-PL-14298-01-00

Inspection / identification	Group I.1: Determination of emissions				
	Task area G: Gaseous inorganic compounds				
Components*	Standard / Directive / Technical rule		SRM	QM Document	Remark Location
	Title	Designation			
H ₂ S	Gaseous air pollution measurement; measurement of hydrogen sulphide concentration; methylene blue Impinger method	VDI 2454 Sheet 2 1982-03	<input checked="" type="checkbox"/>	QMA-507-078 QMA-507-032	Immissions method adjusted to emissions
Cl ₂	Gaseous emission measurement; measurement of chlorine and oxides of chlorine; methyl orange method	VDI 3488 Sheet 1 1979-12	<input checked="" type="checkbox"/>	QMA-507-035	
O ₂ continuous	Stationary source emissions - Determination of volume concentration of oxygen (O ₂) - Reference method - Paramagnetism	DIN EN 14789 2006-04	<input checked="" type="checkbox"/>	QMA-507-076	
CO ₂ continuous	Stationary source emissions - Determination of carbon monoxide, carbon dioxide and oxygen - Performance characteristics and calibration of automated measuring systems	ISO 12039 2001-06		QMA-507-081	

Inspection / identification	Group I.1: Determination of emissions				
	Task area G: Gaseous organic compounds				
Components*	Standard / Directive / Technical rule		SRM	QM Document	Remark Location
	Title	Designation			
Flow velocity /volume flow rate	Stationary source emissions - Manual and automatic determination of velocity and volume flow rate in ducts - Part 1: Manual reference method (ISO 16911-1:2013); German version EN ISO 16911-1:2013	DIN EN ISO 16911-1 2013-06	<input checked="" type="checkbox"/>	QMA-507-025	
Total carbon continuous	Stationary source emissions - Determination of the mass concentration of total gaseous organic carbon - Continuous flame ionization detector method	DIN EN 12619 2013-04	<input checked="" type="checkbox"/>	QMA-507-012	

Annex to the accreditation certificate D-PL-14298-01-00

Benzol	Stationary source emissions - Determination of mass concentration of individual gaseous organic compounds - Activated carbon adsorption and solvent desorption method	DIN EN 13649 2002-05 (withdrawn)	<input checked="" type="checkbox"/>	QMA-507- 010 QMA-504- 003 or QMA-504- 010	
Tetrachloro- ethene	Stationary source emissions - Determination of mass concentration of individual gaseous organic compounds - Activated carbon adsorption and solvent desorption method	DIN EN 13649 2002-05 (withdrawn)	<input checked="" type="checkbox"/>	QMA-507- 010 QMA-504- 003 or QMA-504- 011	
PAH	Measurement of emissions - Measurement of polycyclic aromatic hydrocarbons (PAH) - GC/MC method	VDI 3874 2006-12	<input checked="" type="checkbox"/>	QMA-507- 058 QMA-507- 050	
Total carbon	Gaseous emission measurement - Determination of gaseous organic carbon in waste gases - Adsorption on silica gel	VDI 3481 Sheet 2 1998-09		QMA-507- 022 QMA-507- 023	
Toluene, xylenes, ethylbenzene or similar	Stationary source emissions - Determination of mass concentration of individual gaseous organic compounds - Activated carbon adsorption and solvent desorption method	DIN EN 13649 2002-05 (withdrawn)	<input checked="" type="checkbox"/>	QMA-507- 010 QMA-504- 003 or QMA-504- 010	
Trichloroethene or similar	Stationary source emissions - Determination of mass concentration of individual gaseous organic compounds - Activated carbon adsorption and solvent desorption method	DIN EN 13649 2002-05 (withdrawn)	<input checked="" type="checkbox"/>	QMA-507- 010 QMA-504- 003 or QMA-504- 011	
Formaldehyde	Gaseous emission measurement - Measurement of formaldehyde by the AHMT method	VDI 3862 Sheet 4 2001-05		QMA-507- 077 QMA-507- 006	

Annex to the accreditation certificate D-PL-14298-01-00

Inspection / identification	Group I.1: Determination of emissions Task area G: Gaseous organic compounds				
	Standard / Directive / Technical rule Title		SRM	QM Document	Remark Location
Formaldehyde	Gaseous emission measurement - Measurement of formaldehyde by the acetylacetone method	VDI 3862 Sheet 6 2004-02		QMA-507- 077 QMA-507- 030	
Aldehydes and ketones	Gaseous emission measurement - Measurement of aliphatic and aromatic aldehyde and ketones by DNPH method - Impinger method	VDI 3862 Sheet 2 2000-12		QMA-507- 082 QMA-504- 182	
Aldehydes and ketones	Gaseous emission measurement - Measurement of aliphatic and aromatic aldehydes and ketones by DNPH method - Cartridges method	VDI 3862 Sheet 3 2000-12		QMA-507- 010 QMA-507- 001	
Nitrosamines	Sampling and analysis of nitrosamines in emissions	Measuring procedure		QMA 507- 010 QMA 504- 178	

Annex to the accreditation certificate D-PL-14298-01-00

Inspection / identification	Group I.1: Determination of emissions Task area P: Particulate and adsorbed particles of chemical compounds				
	Standard / Directive / Technical rule		SRM	QM Document	Remark Location
Components*	Title	Designation			
Flow velocity /volume flow rate	Stationary source emissions - Manual and automatic determination of velocity and volume flow rate in ducts - Part 1: Manual reference method (ISO 16911-1:2013); German version EN ISO 16911-1:2013	DIN EN ISO 16911-1 2013-06	<input checked="" type="checkbox"/>	QMA-507-025	
Dust, Filter device	Particulate matter measurement - Dust measurement in flowing gases - Gravimetric determination of dust load	VDI 2066 Sheet 1 2006-11	<input checked="" type="checkbox"/>	QMA-507-021 QMA-507-075	for concentrations >20 mg/m ³
Dust, Plane filter device	Stationary source emissions - Determination of low range mass concentration of dust - Part 1: Manual gravimetric method	DIN EN 13284-1 2002-04	<input checked="" type="checkbox"/>	QMA-507-020 QMA-507-075	for concentrations <20 mg/m ³
PAH	Measurement of emissions - Measurement of polycyclic aromatic hydrocarbons (PAH) - GC/MC method	VDI 3874 2006-12	<input checked="" type="checkbox"/>	QMA-507-058 QMA-507-050	
Arsenic (As)	Stationary source emissions - Determination of the total emission of As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, Tl and V	DIN EN 14385 2004-05	<input checked="" type="checkbox"/>	QMA-507-019 QMA-507-044	
Cadmium (Cd)	Stationary source emissions - Determination of the total emission of As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, Tl and V	DIN EN 14385 2004-05	<input checked="" type="checkbox"/>	QMA-507-019 QMA-507-044	
Nickel (Ni)	Stationary source emissions - Determination of the total emission of As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, Tl and V	DIN EN 14385 2004-05	<input checked="" type="checkbox"/>	QMA-507-019 QMA-507-044	
Lead (Pb)	Stationary source emissions - Determination of the total emission of As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, Tl and V	DIN EN 14385 2004-05	<input checked="" type="checkbox"/>	QMA-507-019 QMA-507-044	

Inspection / identification	Group I.1: Determination of emissions Task area P: Particulate and adsorbed particles of chemical compounds				
	Standard / Directive / Technical rule Title		SRM	QM Document	Remark Location
Mercury (Hg)	Air quality - Stationary source emissions - Manual method of determination of the concentration of total mercury	DIN EN 13211-06 and corrigenda 2005-06	<input checked="" type="checkbox"/>	QMA-507-019 QMA-507-041	
Metals	Stationary source emissions - Determination of the total emission of As, Cd, Cr, Co, Cu, Mn, Ni, Pb, Sb, Tl and V	DIN EN 14385 2004-05	<input checked="" type="checkbox"/>	QMA-507-019 QMA-507-044	
Metals, metalloids (particulate and filter-passing as a supplement to above)	Determination of total emission of metals, metalloids, and their compounds - Manual measurement in flowing, emitted gases - Sampling system for particulate and filter-passing matter	VDI 3868 Sheet 1 1994-12		QMA-507-019 QMA-507-044	
Chromium VI	Chromium(VI) compounds	IFA 6665 2006-10		QMA-507-019 QMA-507-018	
Soot number	Measurement of particles - Dust measurement in flowing gases - Measurement of smoke number in furnaces designed for EL-type fuel oil	VDI 2066 Sheet 8 1995-09		QMA-507-083	
Dust PM10 / PM2.5	Particulate matter measurement - Dust measurement in flowing gases - Measurement of PM ₁₀ and PM _{2,5} emissions at stationary sources by impaction method	VDI 2066 Sheet 10 2004-10		QMA-507-084	

Inspection / identification	Group I.1: Determination of emissions Area of responsibility Sp: Special sampling of substances that a special care in sampling or analysis				
Components	Standard / Directive / Technical rule Title		SRM	QM Document	Remark Location
e.g. PCDDs/PCDFs	Stationary source emissions - Determination of the mass concentration of PCDDs/PCDFs and dioxin-like PCBs - Part 1: Sampling of PCDDs/PCDFs	DIN EN 1948-1 2006-06	<input checked="" type="checkbox"/>	QMA-507-029	

Inspection / identification	Group II.1 and II.2: Verification of proper installation and function as well as Calibration of continuously operating emission measuring equipment				
	Measuring task	Standard / Directive / Technical rule		SRM	QM Document
	Title	Designation			
Certificate of proper installation	Stationary source emissions - Quality assurance of automated measuring and electronic data evaluation systems	VDI 3950 2006-12	<input checked="" type="checkbox"/>	QMA-507-034 QMA-507-056 QMA-507-074	
Function tests	Stationary source emissions - Quality assurance of automated measuring and electronic data evaluation systems	VDI 3950 2006-12	<input checked="" type="checkbox"/>	QMA-507-034 QMA-507-056 QMA-507-074	
	Stationary source emissions - Quality assurance of automated measuring systems	DIN EN 14181 2012-11 (withdrawn)-----			
	Stationary source emissions - Guidelines for application of EN 14181:2004	DIN SPEC 1178 2010-05			
Calibrations	Stationary source emissions - Quality assurance of automated measuring and electronic data evaluation systems	VDI 3950 2006-12	<input checked="" type="checkbox"/>	QMA-507-034 QMA-507-056 QMA-507-074	
Mass concentration of dust	Stationary source emissions – Determination of low range mass concentration of dust - Part 2: Automated measuring systems	DIN EN 13284-2 2004-12	<input checked="" type="checkbox"/>	QMA-507-034 QMA-507-056 QMA-507-074	

The listed procedures meet the requirements for
"Technical instruction for investigations in the field of immission protection"
("Immission Protection Module") in the version of September 15, 2011.

Competence is confirmed for the immission protection regulated testing and technical task areas

Group I No.1: G, P, Sp

Group II No.1.

Responsible professional: Dr. Bernd Rössner	Ranges: I.1 G, P, Sp II.1
Deputy: Claudia Scholz (Dipl.-Ing.)	Ranges: I.1 G, P II.1
Deputy: (Dipl.-Ing.) Heiko Pinkepank (Dipl.-Ing (FH))	Ranges: I.1 G, P, Sp II.1

The procedures listed comply with the requirements valid towards determining the concentration of hazardous substances in workplaces. Along with the examination of a sufficient number of reports submitted for the individual groups, for

Group 1

Group 3

Group 4

Group 5 coolants, N-nitrosamines, DME, isocyanates

Competence is confirmed for the determining and assessing the concentrations of hazardous substances in the workplace atmosphere according to Hazardous Material Directive Section 7, para. 10.

Responsible professional: Dr. Bernd Rössner
Deputy Responsible professional: Heiko Pinkepank (Dipl.-Ing (FH))

Abbreviations used:

ASTM American Society for Testing and Materials
DIN Deutsches Institut für Normung e.V.
EN European standard
ISO International Organization for Standardization
IEC International Electrotechnical Commission
IFA Institute for Occupational Safety and Health