

Air Monitoring Methods DGUV Information 213-5xx (former BGI 505 and BGI/GUV-I 505) acknowledged by German accident insurance institutions to determine the concentrations of substances classified as carcinogenic, mutagenic and toxic for reproduction in working areas

No.	Chemical substance	CAS-No.	Analytical method	LOQ* / LOD**	German version	Translation	Note
213-537	Acrylamide	79-06-1	01 GC after desorption	0.003 **	08/87	Vol. 7	W
213-537	Acrylamide	79-06-1	02 HPLC after desorption	0.003 **	08/87	Vol. 7	W
213-537	Acrylamide	79-06-1	03 GC after desorption	0.006 *	10/90	Vol. 7	W
213-537	Acrylamide	79-06-1	04 GC/MS after elution	0.001 *	12/04	Vol. 11	
213-501	Acrylonitrile	107-13-1	02 Headspace GC or GC after desorption	1.3 **	12/83		W
213-501	Acrylonitrile	107-13-1	03 GC after desorption	0.6 *	03/04	Vol. 10	
213-579	Acrylonitrile in tobacco smoke in the ambient air	107-13-1	01 GC/MS after desorption	0.0001 *	11/09	online	
213-583	Aromatic amines		01 GC after desorption	0.003 - 0.026 *	03/12	online	
213-583	Aromatic amines		02 GC after alkaline extraction and derivatisation	0.000001 - 0.000008 *	06/19		
213-583	2-Aminobiphenyl	90-41-5	02 GC after alkaline extraction and derivatisation	0.000002 *	06/19		
213-583	3-Aminobiphenyl	2243-47-2	02 GC after alkaline extraction and derivatisation	0.000001 *	06/19		
213-502	4-Aminobiphenyl	92-67-1	01 DC	0.1 **	12/83		W
213-583	4-Aminobiphenyl	92-67-1	02 GC after alkaline extraction and derivatisation	0.000002 *	06/19		
213-583	Aniline (Aminobenzene)	62-53-3	01 GC after desorption	0.006 *	03/12	online	
213-529	Antimony trioxide	1309-64-4	01 AAS with flame technique	0.14 **	08/87		W

No.	Chemical substance	CAS-No.	Analytical method	LOQ* / LOD**	German version	Translation	Note
213-529	Antimony trioxide	1309-64-4	02 AAS with hydride technique	0.004 **	08/87	Vol. 7	W
213-529	Antimony trioxide	1309-64-4	03 AAS with hydride technique after acid digestion	0.00031 *	11/07		
213-503	Arsenic and its anorganic compounds	7440-38-2	01 Photometry after acid digestion	0.04 **	12/83		W
213-503	Arsenic and its anorganic compounds	7440-38-2	02 AAS with hydride technique after acid digestion	0.04 **	12/83		W
213-503	Arsenic and its anorganic compounds	7440-38-2	03 AAS with hydride technique	0.00004 **	12/83		W
213-503	Arsenic and its compounds	7440-38-2	04 GFAAS after acid digestion	0.00025 *	05/13	online	
Note: For volatile compounds such as arsenic trifluoride and arsenic trichloride, particulate samplers are not suitable for sampling.							
213-530	Asbestos (Chrysotile)	12001-29-5	01 Infrared spectroscopy (IR), phase-contrast optical microscopy (Phaco)	IR: 2 % mass fraction *; Phaco: < 1% *	03/91		W
213-530	Asbestos (Amphibole)	1332-21-4	01 Infrared spectroscopy (IR), phase-contrast optical microscopy (Phaco)	IR: 5 % mass fraction *; Phaco: < 1 % *	03/91		W
213-550	Auramine (determination as hydrochloride)	492-80-8	01 HPLC after desorption	0.016 *	05/93		
213-550	Auramine hydrochloride	2465-27-2	01 HPLC after desorption	0.016 *	05/93		
213-504	Benzene	71-43-2	01 A: Headspace GC; B: GC after desorption	A: 0.16 *; B: 0.1 *	10/92		W
213-504	Benzene	71-43-2	02 GC after thermal desorption	0.0025 *	10/92		W
213-504	Benzene	71-43-2	03 GC, MS after thermal desorption	0.002 *			ip
213-504	Benzene	71-43-2	04 GC, MS after desorption	0.004 *			ip
213-525	Benzo[a]pyrene/PAH	50-32-8	01 DC	0.0004 *	07/89		W
213-525	Benzo[a]pyrene/PAH	50-32-8	02 DC	0.00004 *	07/89		W
213-525	Benzo[a]pyrene/PAH	50-32-8	03 Capillary GC	0.00015 *	07/89		W
213-525	Benzo[a]pyrene/PAH	50-32-8	04 HPLC	0.00006 *	07/89		W

No.	Chemical substance	CAS-No.	Analytical method	LOQ* / LOD**	German version	Translation	Note
213-513	Beryllium and its anorganic compounds	7440-41-7	02 GFAAS after acid digestion	0.0000019 *	06/08	Vol. 13	
213-513	Beryllium and its compounds	7440-41-7	01 AAS after acid digestion	0.0004 **	12/83		W
213-506	Bis(chloromethyl)ether	542-88-1	01 GC after desorption	0.04 **	12/83		W
213-506	Bis(chloromethyl)ether	542-88-1	02 GC, MSD after thermal desorption	0.00033 *	07/97	Vol. 5	
213-576	Bis(2-methoxyethyl) ether	111-96-6	01 GC after desorption	0.03 *	03/09	Vol. 13	
213-575	Bisphenol A	80-05-7	01 HPLC after desorption	0.005 *	10/08	Vol. 13	
213-580	Bromomethane	74-83-9	01 GC after thermal desorption	0.5 *	03/10	online	
213-581	Bromoethane	74-96-4	01 GC after thermal desorption	0.74 *	03/10	online	
213-526	1,3-Butadiene	106-99-0	01 Headspace GC	1.1 **	05/85	Vol. 7	W
213-526	1,3-Butadiene	106-99-0	02 Headspace GC	0.025 *	09/18		
213-570	2-Butanone oxime	96-29-7	01 GC after desorption	0.2 *	04/01	Vol. 9	
213-576	2-Butoxyethylacetate	112-07-2	01 GC after desorption	0.02 *	03/09	Vol. 13	
213-576	Butyl glycol	111-76-2	01 GC after desorption	0.06 *	03/09	Vol. 13	
213-554	Cadmium	7440-43-9	01 A: AAS with graphite furnace technique or B: with flame technique after acid digestion	A: 0.0001 * (p. s.); B: 0.00017 * (s. s.)	11/94	Vol. 4	W
213-554	Cadmium	7440-43-9	02 ICP-MS after acid digestion	0.007 - 0.5 *	12/15	online	
213-514	Cadmium chloride	10108-64-2	01 AAS after desorption	0.005 **	12/83		W
213-584	Carbon monoxide	630-08-0	01 NDIR spectroscopy	1.6 ppm *	03/17		
213-584	Carbon monoxide	630-08-0	02 FTIR spectroscopy	0.29 ppm *	03/17		
213-574	Carboxylic acid amides, short chain		01 GC after desorption	0.1 - 1.3 *	04/08	Vol. 13	

No.	Chemical substance	CAS-No.	Analytical method	LOQ* / LOD**	German version	Translation	Note
213-552	4-Chloroaniline	106-47-8	01 HPLC after desorption	0.004 *	05/93	Vol. 4	W
213-577	Chloroprene	126-99-8	01 Headspace GC after desorption	0.3 *	11/09	online	
213-559	α -Chlorotoluene (Benzyl chloride)	100-44-7	01 GC after desorption	0.01 *	12/96	Vol. 5	
213-505	Chromium (VI) compounds		01 Photometry after wet-ashing	0.02 **	12/83		W
213-505	Chromium (VI) compounds		02 Photometry after wet-ashing	0.0048 * (p. s.) or 0.00004 * (s. s.)	05/93	Vol. 4	W
213-505	Chromium (VI) compounds		03 Ion chromatography (IC) after wet-ashing	0.00024 * (p. s.) or 0.00001 * (s. s.)	05/93	Vol. 4	W
				Note: Chemical inert pumps have to be used in order to avoid corrosion.			
213-504	Chromium (VI) compounds		04 Photometry after extraction	0.00048 * or 0.00017 *	03/17		
213-515	Cobalt and its compounds	7440-48-4	01 AAS after acid digestion	0.1 **	08/84		W
213-515	Cobalt and its compounds	7440-48-4	02 AAS with graphite furnace technique after acid digestion	0.02 **	08/84		W
213-515	Cobalt and its compounds	7440-48-4	03 GFAAS after acid digestion	0.0018 *	03/04	Vol. 10	
213-515	Cobalt and its compounds	7440-48-4	04 GFAAS after microwave digestion	0,000058			ip
213-553	p-Cresidine	120-71-8	01 HPLC after desorption	0.0075 *	05/93	Vol. 4	W
213-582	Cristobalite	14464-46-1	01 Infrared spectroscopy after gravimetric determination of the alveolar dust	0.0003 - 0.13 *	06/12	online	
213-582	Cristobalite	14464-46-1	02 X-ray diffraction after gravimetric determination of the alveolar dust				ip
213-539	4,4-Diaminodiphenylmethane (MDA)	101-77-9	01 Photometry after derivatisation	0.025 *	11/94	Vol. 4	W
213-539	4,4-Diaminodiphenylmethane (MDA)	101-77-9	02 Photometry after derivatisation	0.008 *	11/94	Vol. 4	
213-539	4,4-Diaminodiphenylmethane (MDA)	101-77-9	03 HPLC after elution	0.008 *	11/94	Vol. 4	
213-563	1,5-Diaminonaphthalene	2243-62-1	01 HPLC after desorption	0.016 *	12/98	Vol. 5	

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213-516	1,2-Dibromoethane	106-93-4	01 GC after elution	0.004 **	12/83		W
213-517	3,3'-Dichlorobenzidine	91-94-1	01 Photometry after derivatisation	0.02 **	12/83		W
213-517	3,3'-Dichlorobenzidine	91-94-1	02 GC after desorption	0.02 **	12/83		W
213-532	1,4-Dichloro-2-butene	764-41-0	01 Headspace GC	0.005 **	01/86		W
213-548	1,2-Dichloroethane	107-06-2	01 Headspace GC after desorption	0.08 *	03/91	Vol. 4	
213-565	Dichloromethane	75-09-2	03 GC after thermal desorption	0.95 *	10/14	online	
213-555	cis-/trans-1,3-Dichloropropene	542-75-6	01 GC after desorption	0.1 *	11/94	Vol. 7	W
213-555	cis-/trans-1,3-Dichloropropene	542-75-6	02 Headspace GC after desorption	0.8 *	11/94	Vol. 7	W
213-542	α,α-Dichlorotoluene	98-87-3	01 GC after desorption	0.01 *	03/89	Vol. 5	W
213-542	α,α-Dichlorotoluene	98-87-3	02 GC after desorption	0.01 *	12/96	Vol. 5	W
213-544	Diesel engine emissions		01 Coulometric determination of the total carbon in the respirable dust fraction	0.002 *	06/95	Vol. 4	W
213-544	Diesel engine emissions		02 Coulometric determination of organically bound carbon and the el. C in the respirable dust fraction	0.003 *	06/95	Vol. 4	
213-518	Diethyl sulfate	64-67-5	01 GC, FPD after desorption	0.04 **	12/83	Vol. 5	W
213-518	Diethyl sulfate	64-67-5	02 Thin-layer chromatography after derivatisation	0.1 **	12/83	Vol. 5	W
213-518	Diethyl sulfate	64-67-5	03 GC, FPD after desorption	0.015 **	01/87	Vol. 5	W
213-518	Diethyl sulfate	64-67-5	04 GC, MSD after desorption	0.01 *	04/97	Vol. 5	
213-518	Diethyl sulfate	64-67-5	05 GC/MS after thermal desorption	0.003 *	02/07	Vol. 12	
213-574	N,N-Dimethylacetamide	127-19-5	01 GC after desorption	0.09 *	04/08	Vol. 13	

No.	Chemical substance	CAS-No.	Analytical method	LOQ* / LOD**	German version	Translation	Note
213-583	2,4-Dimethylaniline (2,4-Xylidine)	95-68-1	01 GC after desorption	0.003 *	03/12	online	
213-583	2,5-Dimethylaniline (2,5-Xylidine)	95-78-3	01 GC after desorption	0.005 *	03/12	online	
213-583	2,6-Dimethylaniline (2,6-Xylidine)	87-62-7	01 GC after desorption	0.004 *	03/12	online	
213-535	Dimethyl carbamoyl chloride	79-44-7	01 Photometry after derivatisation	0.05 **	01/87	Vol. 7	W
213-551	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	01 HPLC after desorption	0.01 *	05/93		
213-574	N,N-Dimethylformamide	68-12-2	01 GC after desorption	0.13 *	04/08	Vol. 13	
213-543	Dimethylsulfamoyl chloride	13360-57-1	01 GC after desorption	0.03 *	07/89	Vol. 7	W
213-507	Dimethyl sulfate	77-78-1	01 Thin-layer chromatography after derivatisation	0.1 **	12/83	Vol. 5	W
213-507	Dimethyl sulfate	77-78-1	02 GC, FPD after desorption	0.04 **	12/83	Vol. 5	W
213-507	Dimethyl sulfate	77-78-1	03 GC, FPD after desorption	0.015 **	01/87	Vol. 5	W
213-507	Dimethyl sulfate	77-78-1	04 GC, MSD after desorption	0.01 *	04/97	Vol. 5	
213-507	Dimethyl sulfate	77-78-1	05 GC/MS after thermal desorption	0.0009 *	10/06	Vol. 12	
213-560	2,3-Dinitrotoluene	602-01-7	01 GC after desorption	0.001 *	02/96	Vol. 5	
213-560	2,4-Dinitrotoluene	121-14-2	01 GC after desorption	0.001 *	02/96	Vol. 5	
213-567	2,4-Dinitrotoluene	121-14-2	01 HPLC after elution	0.005 *	09/99	Vol. 9	
213-540	2,6-Dinitrotoluene	606-20-2	01 GC after desorption	0.005 *	01/89	Vol. 7	W
213-560	2,6-Dinitrotoluene	606-20-2	01 GC after desorption	0.001 *	02/96	Vol. 5	
213-567	2,6-Dinitrotoluene	606-20-2	01 HPLC after elution	0.005 *	09/99	Vol. 9	
213-560	3,4-Dinitrotoluene	610-39-9	01 GC after desorption	0.001 *	02/96	Vol. 5	

No.	Chemical substance	CAS-No.	Analytical method	LOQ* / LOD**	German version	Translation	Note
213-560	3,5-Dinitrotoluene	618-85-9	01 GC after desorption	0.001 *	02/96	Vol. 5	
213-567	Dinitrotoluene	25321-14-6	01 HPLC after elution	0.005 *	09/99	Vol. 9	
213-560	Dinitrotoluene, technical isomers	25321-14-6	01 GC after desorption	0.001 *	02/96	Vol. 5	
213-576	Dipropylene glycol	110-98-5	01 GC after desorption	0.31 *	03/09	Vol. 13	
213-508	Epichlorohydrine (1-Chloro-2,3-epoxypropane)	106-89-8	01 GC after desorption	0.4 **	12/83		V
213-508	Epichlorohydrine (1-Chloro-2,3-epoxypropane)	106-89-8	02 GC after thermal desorption	0.039 *			ip
213-556	1,2-Epoxybutane	106-88-7	01 GC after thermal desorption	0.1 *	11/94	Vol. 7	
213-556	1,2-Epoxybutane	106-88-7	02 GC after desorption	0.5 *	11/94	Vol. 7	
213-556	1,2-Epoxybutane	106-88-7	03 Headspace GC, MS	0.15 *	02/07	Vol. 12	
213-528	1,2-Epoxypropane	75-56-9	01 A: Headspace GC; B: GC after desorption	A: 0.025 *; B: 0.5 *	11/94	Vol. 4	
213-528	1,2-Epoxypropane	75-56-9	02 GC after desorption and derivatisation with HBr	0.1 *	11/94	Vol. 4	W
213-528	1,2-Epoxypropane	75-56-9	03 GC after thermal desorption	0.1 *	11/94	Vol. 4	
213-528	1,2-Epoxypropane	75-56-9	04 Headspace GC, MS	0.13 *	02/07	Vol. 12	
213-583	4-Ethoxyaniline (p-Phenitidine)	156-43-4	01 GC after desorption	0.026 *	03/12	online	
213-576	2-Ethoxyethanol	110-80-5	01 GC after desorption	0.23 *	03/09	Vol. 13	
213-576	2-Ethoxyethyl acetate	111-15-9	01 GC after desorption	0.05 *	03/09	Vol. 13	
213-527	Ethylene oxide	75-21-8	01 A: Headspace GC; B: GC after desorption	0.9 **	05/85	Vol. 4	W
213-527	Ethylene oxide	75-21-8	02 GC after desorption and derivatisation with HBr	0.1 *	11/94	Vol. 4	W

No.	Chemical substance	CAS-No.	Analytical method	LOQ* / LOD**	German version	Translation	Note
213-527	Ethylene oxide	75-21-8	03 GC after thermal desorption	0.1 *	05/93	Vol. 4	W
213-527	Ethylene oxide	75-21-8	04 Headspace GC, MS	0.055 *	10/06	Vol. 12	W
213-527	Ethylene oxide	75-21-8	05 GC after thermal desorption	0.04 *	10/06	Vol. 12	W
213-527	Ethylene oxide	75-21-8	06 GC after thermal desorption	0.015 *	11/17		
213-527	Ethylene oxide	75-21-8	07 GC after desorption and derivatisation with HBr	0.007 *			ip
213-519	Ethylene imine	151-56-4	01 HPLC	0.2 **	12/83		OEL
213-531	Fibres, alveolar (e. g. Asbestos)		01 Phase-contrast optical microscopy	20,000 fibres/m ³ **	01/91		W
213-531	Fibres, alveolar (e. g. Asbestos)		02 Phase-contrast optical microscopy	15,000 fibres/m ³ **	04/04	Vol. 11	W
213-531	Fibres, alveolar (e. g. Asbestos)		03 Phase-contrast optical microscopy	15,000 fibres/m ³ **	03/13		
213-546	Fibres, inorganic (e. g. Asbestos)		01 SEM/EDXA	15,000 fibres/m ³ **	01/91		W
213-546	Fibres, inorganic (e. g. Asbestos)		02 SEM/EDXA	15,000 fibres/m ³ **	04/04	Vol. 11	W
213-546	Fibres, inorganic (e. g. Asbestos)		03 SEM/EDXA	15,000 fibres/m ³ **	03/13		
213-574	Formamide	75-12-7	01 GC after desorption	1.3 *	04/08	Vol. 13	
213-576	Glycol ether and glycol esters		01 GC after desorption	0.02 - 0.31 *	03/09	Vol. 13	
213-576	Hexylglycol	112-25-4	01 GC after desorption	0.04 *	03/09	Vol. 13	
213-520	Hydrazine	302-01-2	01 HPLC	0.013 **	12/83		W
213-520	Hydrazine	302-01-2	02 Photometry after derivatisation	0.013 **	12/83		W
213-520	Hydrazine	302-01-2	03 Photometry after derivatisation	0.007 *	04/01		W
213-520	Hydrazine	302-01-2	04 GC after desorption	0.002 *	05/14	online	

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213-524	Iodomethane	74-88-4	01 GC after elution	0.03 **	08/84		W
213-573	Lead and its inorganic compounds	7439-92-1	01 GFAAS after acid digestion	0.00013 *	11/07	Vol. 13	
213-572	Methoxyacetic acid	625-45-6	01 Ion chromatography (HPIC)	0.74 *	12/02	Vol. 10	
213-583	2-Methoxyaniline (o-Anisidine)	90-04-0	01 GC after desorption	0.007 *	03/12	online	
213-583	3-Methoxyaniline (m-Anisidine)	536-90-3	01 GC after desorption	0.017 *	03/12	online	
213-583	4-Methoxyaniline (p-Anisidine)	104-94-9	01 GC after desorption	0.018 *	03/12	online	
213-576	2-Methoxyethanol	109-86-4	01 GC after desorption	0.19 *	03/09	Vol. 13	
213-576	2-(2-Methoxyethoxy)ethanol	111-77-3	01 GC after desorption	0.15 *	03/09	Vol. 13	
213-576	2-Methoxyethyl acetate	110-49-6	01 GC after desorption	0.03 *	03/09	Vol. 13	
213-576	2-Methoxy-1-propanol	1589-47-5	01 GC after desorption	0.02 *	03/09	Vol. 13	
213-583	2-Methylaniline (o-Toluidine)	95-53-4	01 GC after desorption	0.010 *	03/12	online	
213-583	2-Methylaniline (o-Toluidine)	95-53-4	02 GC after alkaline extraction and derivatisation	0.000005 *	06/19		
213-583	3-Methylaniline (m-Toluidine)	108-44-1	01 GC after desorption	0.008 *	03/12	online	
213-583	3-Methylaniline (m-Toluidine)	108-44-1	02 GC after alkaline extraction and derivatisation	0.000003 *	06/19		
213-583	4-Methylaniline (p-Toluidine)	106-49-0	01 GC after desorption	0.005 *	03/12	online	
213-583	4-Methylaniline (p-Toluidine)	106-49-0	02 GC after alkaline extraction and derivatisation	0.000002 *	06/19		
213-538	4,4'-Methylene-bis(2-chloroaniline)	101-14-4	01 GC after sample preparation	0.04 **	08/87	Vol. 7	W
213-557	4,4'-Methylene-bis(N,N-dimethylaniline)	101-61-1	01 HPLC after desorption	0.015 *	06/95	Vol. 4	
213-574	N-Methylformamide	123-39-7	01 GC after desorption	0.19 *	04/08	Vol. 13	

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213-583	1-Naphthylamine	134-32-7	02 GC after alkaline extraction and derivatisation	0.000008 *	06/19		
213-509	2-Naphthylamine	91-59-8	01 Thin layer chromatography	0.1 **	12/83		W
213-509	2-Naphthylamine	91-59-8	02 GC after desorption	0.05 **	12/83	Vol. 7	W
Note: Air monitoring method is in preparation (DGUV Information 213-583, method 02).							
213-583	2-Naphthylamine	91-59-8	02 GC after alkaline extraction and derivatisation	0.000004 *	06/19		
213-510	Nickel	7440-02-0	01 AAS	0.1 **	12/83		W
213-510	Nickel	7440-02-0	02 AAS, flame and graphite furnace technique after acid digestion	0.003 * (p. s.) or 0.0004 * (s. s.)	10/92	Vol. 7	W
213-510	Nickel and its inorganic compounds	7440-02-0	03 GFAAS after acid digestion	0.00047 *	11/07	Vol. 13	
213-521	Nickel tetracarbonyl	13463-39-3	01 AAS after acid digestion	0.05 **	12/83		W
213-578	Nicotine in tobacco smoke in the ambient air	54-11-5	01 GC/MS after desorption	0.002 *	11/09	online	
213-578	Nicotine in tobacco smoke in the ambient air	54-11-5	02 GC/MS after desorption	0.0001 *	11/09	online	
213-522	2-Nitronaphthalene	581-89-5	01 GC after desorption	0.05 **	12/83	Vol. 7	W
213-522	2-Nitronaphthalene	581-89-5	02 HPLC after desorption	0.0038 *	04/08	Vol. 13	
213-511	2-Nitropropane	79-46-9	01 GC after desorption	1.1 **	12/83		W
213-523	N-Nitrosodibutylamine	924-16-3	01 GC after elution		12/83		W
213-523	N-Nitrosodibutylamine	924-16-3	02 GC after elution		01/87		W
213-523	N-Nitrosodibutylamine	924-16-3	03 GC after elution	0.0002 *	09/92	Vol. 4	W
213-523	N-Nitrosodibutylamine	924-16-3	04 Capillary GC after elution	0.00008 *	09/92	Vol. 4	W
213-523	N-Nitrosodibutylamine	924-16-3	05 GC with TEA detector after elution	0.000010 *			ip

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213-536	N-Nitrosodiethanolamine	1116-54-7	01 GC after desorption	0.0002 **	01/87		W
213-536	N-Nitrosodiethanolamine	1116-54-7	02 Capillary GC after desorption and silylation	0.000035 *	09/92	Vol. 4	
213-523	N-Nitrosodiethylamine	55-18-5	01 GC after elution		12/83		W
213-523	N-Nitrosodiethylamine	55-18-5	02 GC after elution		01/87		W
213-523	N-Nitrosodiethylamine	55-18-5	03 GC after elution	0.0001 *	09/92	Vol. 4	W
213-523	N-Nitrosodiethylamine	55-18-5	04 Capillary GC after elution	0.00004 *	09/92	Vol. 4	W
213-523	N-Nitrosodiethylamine	55-18-5	05 GC with TEA detector after elution	0.000010 *			ip
213-523	N-Nitrosodiisopropylamine	601-77-4	01 GC after elution		12/83		W
213-523	N-Nitrosodiisoproplamine	601-77-4	02 GC after elution		01/87		W
213-523	N-Nitrosodiisoproplamine	601-77-4	03 GC after elution	0.0001 *	09/92	Vol. 4	W
213-523	N-Nitrosodiisopropylamine	601-77-4	04 Capillary GC after elution	0.00005 *	09/92	Vol. 4	W
213-523	N-Nitrosodiisopropylamine	601-77-4	05 GC with TEA detector after elution	0.000010 *			ip
213-523	N-Nitrosodimethylamine	62-75-9	01 GC after elution		12/83		W
213-523	N-Nitrosodimethylamine	62-75-9	02 GC after elution		01/87		W
213-523	N-Nitrosodimethylamine	62-75-9	03 GC after elution	0.0001 *	09/92	Vol. 4	W
213-523	N-Nitrosodimethylamine	62-75-9	04 Capillary GC after elution	0.00003 *	09/92	Vol. 4	W
213-523	N-Nitrosodimethylamine	62-75-9	05 GC with TEA detector after elution	0.000010 *			ip
213-523	N-Nitrosodipropylamine	621-64-7	02 GC after elution		01/87		W
213-523	N-Nitrosodipropylamine	621-64-7	03 GC after elution	0.0001 *	09/92	Vol. 4	W
213-523	N-Nitrosodi-n-propylamine	621-64-7	01 GC after elution		12/83		W

No.	Chemical substance	CAS-No.	Analytical method	LOQ* / LOD**	German version	Translation	Note
213-523	N-Nitrosodi-n-propylamine	621-64-7	04 Capillary GC after elution	0.00006 *	09/92	Vol. 4	W
213-523	N-Nitrosodi-n-propylamine	621-64-7	05 GC with TEA detector after elution	0.000010 *			ip
213-562	N-Nitrosoethylphenylamine	612-64-6	01 GC after extraction and concentration of the extract	0.00005 *	12/96	Vol. 5	W
213-523	N-Nitrosomethylethylamine	10595-95-6	01 GC after elution		12/83		W
213-523	N-Nitrosomethylethylamine	10595-95-6	04 Capillary GC after elution	0.00003 *	09/92	Vol. 4	W
213-523	N-Nitrosomethylethylamine	10595-95-6	05 GC with TEA detector after elution	0.000010 *			ip
213-523	N-Nitrosomethylethylamine	10595-95-6	02 GC after elution		01/87		W
213-523	N-Nitrosomethylethylamine	10595-95-6	03 GC after elution	0.0001 *	09/92	Vol. 4	W
213-562	N-Nitrosomethylphenylamine	614-00-6	01 GC after extraction and concentration of the extract	0.00005 *	12/96	Vol. 5	W
213-523	N-Nitrosomorpholine	59-89-2	01 GC after elution		12/83		W
213-523	N-Nitrosomorpholine	59-89-2	02 GC after elution		01/87		W
213-523	N-Nitrosomorpholine	59-89-2	03 GC after elution	0.0002 *	09/92	Vol. 4	W
213-523	N-Nitrosomorpholine	59-89-2	04 Capillary GC after elution	0.00006 *	09/92	Vol. 4	W
213-523	N-Nitrosomorpholine	59-89-2	05 GC with TEA detector after elution	0.000010 *			ip
213-523	N-Nitrosopiperidine	100-75-4	01 GC after elution		12/83		W
213-523	N-Nitrosopiperidine	100-75-4	02 GC after elution		01/87		W
213-523	N-Nitrosopiperidine	100-75-4	03 GC after elution	0.0001 *	09/92	Vol. 4	W
213-523	N-Nitrosopiperidine	100-75-4	04 Capillary GC after elution	0.00005 *	09/92	Vol. 4	W
213-523	N-Nitrosopiperidine	100-75-4	05 GC with TEA detector after elution	0.000010 *			ip

No.	Chemical substance	CAS-No.	Analytical method	LOQ* / LOD**	German version	Translation	Note
213-523	N-Nitrosopyrrolidine	930-55-2	01 GC after elution		12/83		W
213-523	N-Nitrosopyrrolidine	930-55-2	02 GC after elution		01/87		W
213-523	N-Nitrosopyrrolidine	930-55-2	03 GC after elution	0.0002 *	09/92	Vol. 4	W
213-523	N-Nitrosopyrrolidine	930-55-2	04 Capillary GC after elution	0.00005 *	09/92	Vol. 4	W
213-523	N-Nitrosopyrrolidine	930-55-2	05 GC with TEA detector after elution	0.000010 *			ip
213-558	2-Nitrotoluene	88-72-2	01 GC after desorption	0.025 *	06/95	Vol. 4	
213-571	Oleum	8014-95-7	01 Ion chromatography (HPIC)	0.04 *	08/01		W
213-571	Oleum	8014-95-7	02 Ion chromatography (HPIC)	0.002 *	12/04	Vol. 9	
213-564	1,2-Phenylenediamine	95-54-5	01 HPLC after desorption	0.006 *	12/98	Vol. 5	
213-564	1,3-Phenylenediamine	108-45-2	01 HPLC after desorption	0.004 *	12/98	Vol. 5	
213-576	Phenyl glycol	122-99-6	01 GC after desorption	0.05 *	03/09	Vol. 13	
213-547	Polychlorinated dibenzodioxins and dibenzofurans, 2,3,7,8-substituted	1746-01-6	01 GC/HRMS after desorption and clean-up of the extract	10 pg *	01/91		W
213-547	Polychlorinated dibenzodioxins and dibenzofurans, 2,3,7,8-substituted	1746-01-6	02 GC/HRMS after desorption and clean-up of the extract	10 pg *	01/91		W
213-547	Polychlorinated dibenzodioxins and dibenzofurans, 2,3,7,8-substituted	1746-01-6	03 GC/HRMS after desorption and clean-up of the extract	0.15 - 1.5 pg/m ³ *	07/97	Vol. 5	
213-533	1,3-Propane sultone	1120-71-4	01 GC	0.25 **	01/86		W
213-582	Quartz	14808-60-7	01 Infrared spectroscopy after gravimetric determination of the alveolar dust	0.0003 - 0.13 *	06/12	online	
213-582	Quartz	14808-60-7	02 X-ray diffraction after gravimetric determination of the alveolar dust				ip
213-568	Sulfuric acid	7664-93-9	01 Ion chromatography (HPIC) after elution	0.01 *	08/01	Vol. 9	

No.	Chemical substance	CAS-No.	Analytical method	LOQ* / LOD**	German version	Translation	Note
213-571	Sulfuric acid	7664-93-9	01 Ion chromatography (HPIC)	0.04 *	08/01		W
213-571	Sulfuric acid	7664-93-9	02 Ion chromatography (HPIC)	0.002 *	12/04	Vol. 9	
213-565	Tetrachloroethene	127-18-4	01 GC after desorption	4.2 *	03/00	Vol. 9	W
213-565	Tetrachloroethene	127-18-4	02 GC after desorption	0.04 *	10/14	online	
213-565	Tetrachloroethene	127-18-4	03 GC after thermal desorption	1.9 *	10/14	online	
213-565	Tetrachloromethane	56-23-5	02 GC after desorption	0.24 *	10/14	online	
213-569	Thiourea	62-56-6	01 HPLC after elution	0.002 * (p. s.) or 0.0006 * (s. s.)	04/01	Vol. 9	
213-578	Tobacco smoke in the ambient air (Nicotine)	54-11-5	01 GC/MS after desorption	0.002 *	11/09	online	
213-578	Tobacco smoke in the ambient air (Nicotine)	54-11-5	02 GC/MS after desorption	0.0001 *	11/09	online	
213-579	Tobacco smoke in the ambient air (Acrylonitrile)	107-13-1	01 GC/MS after desorption	0.0001 *	11/09	online	
213-545	2,4-Toluediamine	95-80-7	01 HPLC after desorption	0.02 *	10/90	Vol. 4	
213-549	o-Toluidine	95-53-4	01 GC after desorption	0.01 *	09/92	Vol. 7	W
Note: Air monitoring method DGUV Information 213-583 is validated for o-Toluidine (2-Methylaniline).							
213-534	2,3,4-Trichloro-1-butene	2431-50-7	01 Headspace GC	0.007 **	01/86		W
213-565	1,1,1-Trichloroethane	71-55-6	02 GC after desorption	0.04 *	10/14	online	
213-565	1,1,1-Trichloroethane	71-55-6	03 GC after thermal desorption	4.3 *	10/14	online	
213-565	1,1,2-Trichloroethane	79-00-5	02 GC after desorption	0.04 *	10/14	online	
213-565	Trichloroethene	79-01-6	01 GC after desorption	4.2 *	03/00	Vol. 9	W
213-565	Trichloroethene	79-01-6	02 GC after desorption	0.04 *	10/14	online	

No.	Chemical substance	CAS-No.	Analytical method	LOQ* / LOD**	German version	Translation	Note
213-565	Trichloroethene	79-01-6	03 GC after thermal desorption	0.85 *	10/14	online	
213-565	Trichloromethane	67-66-3	02 GC after desorption	0.09 *	10/14	online	
213-561	α,α,α -Trichlortoluene (Benzotrichloride)	98-07-7	01 GC after desorption	0.01 *	12/96	Vol. 5	
213-566	Triglycidyl isocyanurate	2451-62-9	01 HPLC after elution	0.008 *	04/99	Vol. 9	
213-567	2,4,6-Trinitrotoluene	118-96-7	01 HPLC after elution	0.007 *	09/99	Vol. 9	
213-512	Vinyl chloride	75-01-4	01 GC after elution	0.5 **	10/92	Vol. 4	W
213-512	Vinyl chloride	75-01-4	02 Headspace GC after desorption	0.03 *	10/92	Vol. 4	W
213-512	Vinyl chloride	75-01-4	03 GC after thermal desorption	0.00023 *	11/18		ip
213-541	Wood dust		01 Gravimetry	0.02 - 0.25 *	01/88		W
213-541	Wood dust		02 Gravimetry	0.02 - 0.27 *	10/06	Vol. 13	

* LOQ, quantification limit (mg/m³), ** LOD, detection limit (mg/m³)

s. s. ... static sampling; p. s. ... personal sampling

Translation... Analyses of Hazardous Substances in Air (Titel Vols. 1 - 8); The MAK Collection for Occupational Health and Safety, Part III: Air Monitoring Methods (Vols. 9 - 13). Online available at: <http://onlinelibrary.wiley.com/book/10.1002/3527600418/topics> (online: Web only).

OEL ... As the occupational limit value has been lowered, the quantification limit does no longer comply with the requirements of TRGS 402, sect. 3.7.

V ... Validation does no longer comply with the requirements of DIN EN 482.

W ... withdrawn

ip ... in progress (German version)