

Threshold Values for Substances of Cables⁷⁾ used in indoor environment (bureaus, living space, etc.), based on German guide values for indoor air quality; **Status: January 2020**

(guide values worked out by "Innerraumlufthygiene-Kommission" as a part of the Federal Environment Agency; <http://www.umweltbundesamt.de/gesundheits-e/innenraumhygiene/richtwerte-irluft.htm>)

Compound	CAS-Number	Guide value II (mg/m ³) ¹	Guide value I (mg / m ³) ¹	Year of establishment	Classification for supply cables ^{2,7}	Recommended limit for supply cables ^{3,4,7} (mg/kg) used in indoor area
Stickstoffdioxid	10102-44-0	0,25 (60 min-value)	0,08 (60 min value)	2018	Category 3	
2-Phenoxyethanol	122-99-6	0,1	0,03	2018	Category 2	100
Tetrachlorethen	127-18-4	1	0,1	2017	Category 2	10
Propan-1,2-diol	57-55-6	0,6	0,06	2017	Category 3	
C7 and C8 - Alkylbenzenes (guide value for the sum of toluene, ethylbenzene and xylenes)	108-88-3 100-41-4 95-47-6 108-38-3 106-42-3 1330-20-7	sum guide value: 0,1 {calculated by: \sum [toluene: (concentration / guide value)] + [ethylbenzene: (concentration / guide value)]+ [xylenes: (concentration / guide value)]}	sum guide value: 1 {calculated by: \sum [toluene: (concentration / guide value)] + [ethylbenzene: (concentration / guide value)] + [xylenes: (concentration / guide value)]}	2016	Category 1	10
Formaldehyd	50-00-0	not derived	0,1	2016	Category 3	
Xylenes Sum	95-47-6 108-38-3 106-42-3 1330-20-7	0,8	0,1	2015	Category 1	10
2-Butanonoxim	96-29-7	0,06	0,02	2015	Category 1	1
Chlorpropan	75-29-6	8	0,8	2015	Category 3	
Ethylacetat	141-78-6	6	0,6	2014	Category 2	10
1-Methyl-2-pyrrolidone	872-50-4	1	0,1	2014	Category 1	10
1-Butanol	71-36-3	2	0,7	2014	Category 2	10
Naphthalene and naphthalene-like compounds	91-20-3 and others	0,03	0,01	2013	Category 1	1
Acetaldehyd	75-07-0	1	0,1	2013	Category 3	
2-Ethylhexanol	104-76-7	1	0,1	2013	Category 2	100
Ethylenglykolmonomethylether (EGME) ⁶	109-86-4	0,2	0,02	2013	Category 2	10
Diethylenglykolmethylether (DEGME)	111-77-3	6	2	2013	Category 2	100
Diethylenglykoldimethylether (DEGDME) ⁶	111-96-6	0,3	0,03	2013	Category 2	10
Ethylenglykolmonoethylether (EGEE) ⁶	110-80-5	1	0,1	2013	Category 2	10
Ethylenglykolmonoethylether-acetat (EGEEA) ⁶	111-15-9	2	0,2	2013	Category 2	10
Diethylenglykolmonoethylether (DEGEE)	111-90-0	2	0,7	2013	Category 3	
Ethylenglykolbutylether (EGBE)	111-76-2	1	0,1	2013	Category 2	100

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Ethylenglykolbutyletheracetat (EGBEA)	112-07-2	2	0,2	2013	Category 2	100
Diethylenglykolbutylether (DEGBE)	112-34-5	1	0,4	2013	Category 2	100
Ethylenglykolhexylether (EGHE)	112-25-4	1	0,1	2013	Category 3	
2-Propylenglykol-1-methylether (2PG1ME)	107-98-2	10	1	2013	Category 3	
Dipropylenglykol-1-methylether (D2PGME) and isomers	34590-94-8 13429-07-7 20324-32-7 13588-28-8 55956-21-3	7	2	2013	Category 3	
2-Propylenglykol-1-ethylether (2PG1EE)	1569-02-4	3	0,3	2013	Category 3	
2-Propylenglykol-1-tertbutylether (2PG1tBE)	57018-52-7	3	0,3	2013	Category 3	
Different glycol ether with insufficient data base	different compounds	50	5	2013	Category 3	
Methylisobutylketon	108-10-1	1	0,1	2013	Category 2	10
Ethylbenzene	100-41-4	2	0,2	2012	Category 2	10
C9 - C15-Alkylbenzenes	different compounds	1	0,1	2012	Category 2	100
Cresoles	different compounds	0,05	0,005	2012	Category 1	1
Phenol	108-95-2	0,2	0,02	2011	Category 1	1
2-Furaldehyd	98-01-1	0,1	0,01	2011	Category 1	1
Zyklische Dimethylsiloxane D3-D6 (summary guide value)	different compounds	4	0,4	2011	Category 2	100
Benzaldehyde	100-52-7	0,2	0,02	2010	Category 2	10
Benzylalcohol	100-51-6	4	0,4	2010	Category 2	100
Monocyclic monoterpenes (lead substance d-Limonene)	5989-27-5 (d-Limonen)	10	1	2010	Category 2	100
Aldehydes (C4-C11, saturated acyclic aliphatic)	different compounds	2	0,2	2009	Category 2	10
C9 – C14-Alkanes / Isoalkanes (dearomatized)	different compounds	2	0,1	2009	Category 2	100
Bicyclic terpenes (Lead substance α-Pinen)	80-56-8 (α-Pinen)	2	0,2	2003	Category 2	100
Tris(2-chlorethyl)phosphate (TCEP)	115-96-8	0,05	0,005	2002	Category 2	100
Diisocyanates	different compounds			1999	Category 2	100
Mercury (as metallic vapor)	7439-97-6	0,00035	0,000035	1999	Category 3	
Styrene	100-42-5	0,3	0,03	1998	Category 1	10
Nitrogen dioxide (NO ₂)	10102-44-0	0,35 (30 min.) 0,06 (7 day)	--	1998	Category 3	
Dichlormethane	75-09-2	2 (24 hours) 60 (30 min.) 15 (8 hours)	0,2 6 (30 min.) 1,5 (8 hours)	1997	Category 1	10
Carbon monoxide	630-08-0			1997	Category 3	
Pentachlorphenol (PCP)	87-86-5	0,001	0,0001	1997	Category 2	100
Toluene	108-88-3	3	0,3	1996 / 2016	Category 1	10

Additionally substance according to request of client:

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Benzene	71-43-2				Category 1	1

Nomenclature:

- 1) These are usually long-term values. Deviating averaging periods are given in brackets, e.g. 24 h.
- 2) **Category 1:** Critical compound in supply cables concerning health and smell properties;
Category 2: Critical compound in supply cables concerning smell or health properties;
 Category 3: Compound is not relevant concerning supply cables
- 3) based on given guide values, physical / chemical properties of the compound and on a regular use in indoor areas as bureaus, living rooms, etc.
- 4) limits are related to complete supply cables (including isolations and copper wire) without plugs
- 5) limits in work place area, limits in REACH annex XVII
- 6) substance is actually part of the candidate list for inclusion in REACH Annex 17 as individual substance with individual limit
- 7) limits are valid for supply- and connection cables
 - no guide value of the "Innerraumlufthygiene-Kommission" as a part of the Federal Environment Agency available
 - no limit value for supply cables recommended as the compound is not relevant for supply cables