

National Groundwater Monitoring NAQUA

Federal Office for the Environment FOEN

Active substances and metabolites of pesticides in groundwater

Period of time 2022
Monitoring site Module SPEZ and TREND
Statistics Maximum value per monitoring site

Active substance	Metabolite	Classification during the approval procedure**	Monitoring sites [number]				Monitoring sites [%]	
			sampled	Concentration \geq LOQ	>0.01 $\mu\text{g/l}$	>0.1 $\mu\text{g/l}$	>1 $\mu\text{g/l}$	>0.1 $\mu\text{g/l}$
Asulam			254	21	2	-	-	*
Atrazin			520	101	76	2	-	0.4
(Atrazin)	2-Hydroxy-atrazin	n. ev.	182	21	14	-	-	*
(Atrazin, Propazin)	Desethyl-atrazin	rel.	520	122	96	2	-	0.4
(Atrazin, Simazin, Terbutylazin)	Desethyl-desisopropyl-atrazin	n. ev.	188	44	25	1	-	*
(Atrazin, Simazin)	Desisopropyl-atrazin	rel.	520	19	7	-	-	0.0
Azoxystrobin			51	1	1	-	-	*
(Azoxystrobin)	Azoxystrobinsäure (R234886)	n. rel.	76	1	1	-	-	*
Bentazon			520	18	13	3	-	0.6
Chloridazon			520	1	1	-	-	0.0
(Chloridazon)	Desphenyl-chloridazon (B)	n. rel.	520	166	164	68	6	13.1
(Chloridazon)	Methyl-desphenyl-chloridazon (B1)	n. rel.	520	111	98	17	-	3.3
(Chlorothalonil)	Chlorothalonil R182281	n. ev.	237	1	1	-	-	*
(Chlorothalonil)	Chlorothalonil R417888	#	520	128	128	32	2	6.2
(Chlorothalonil)	Chlorothalonil R419492	#	219	17	17	10	-	*
(Chlorothalonil)	Chlorothalonil R471811	#	520	247	247	162	17	31.2
(Chlorothalonil)	Chlorothalonil R611968	rel.	91	3	3	-	-	*
(Chlorothalonil)	Chlorothalonil SYN 507900	rel.	503	23	22	4	-	0.8
(Chlorothalonil)	Chlorothalonil SYN 548580	n. ev.	229	7	7	1	-	*
(Chlorothalonil)	Chlorothalonil SYN 548581	rel.	219	8	8	-	-	*
(Chlorpyrifos, Chlorpyrifos-methyl)	3,5,6-Trichlor-2-pyridinol	n. ev.	75	1	1	-	-	*
Chlortoluron			520	6	2	1	-	0.2
Clothianidin			1	1	1	-	-	*
(Cyzofamid, Dichlofluanid, Tolyfluanid)	N,N-Dimethylsulfamid	n. rel.	263	27	27	4	-	*
(Cycloxydim)	Cycloxydim BH 517-TSO	n. ev.	1	1	1	1	-	*
(Dichlobenil, Fluopicolid)	2,6-Dichlorbenzamid (BAM)	n. rel.	520	71	45	3	-	0.6
Dimethachlor			222	1	1	-	-	*
(Dimethachlor)	Dimethachlor CGA 369873	n. rel.	520	86	85	15	-	2.9
(Dimethachlor)	Dimethachlor-ESA (CGA 354742)	n. rel.	520	16	16	3	-	0.6
Dimethenamid	Dimethenamid		297	1	1	-	-	*
(Dimethenamid)	Dimethenamid M31	n. rel.	1	1	1	-	-	*
(Dimethenamid)	Dimethenamid-ESA (M27)	n. rel.	520	6	5	-	-	0.0
Diuron			520	5	2	-	-	0.0
Epoxiconazol			1	1	1	-	-	*
(Fipronil)	Fipronil-sulfon (MB46136)	n. rel.	1	1	1	-	-	*
Isoproturon			520	2	1	-	-	0.0
Mecoprop			520	2	1	1	-	0.2
Metamitron			519	3	3	-	-	0.0
(Metamitron)	Desamino-metamitron	n. rel.	503	1	-	-	-	0.0
Metazachlor			519	2	1	-	-	0.0
(Metazachlor)	Metazachlor-ESA (BH 479-08)	n. rel.	520	17	15	-	-	0.0
(Metazachlor)	Metazachlor-OXA (BH 479-04)	n. rel.	445	13	12	1	-	*
Metolachlor			519	8	4	1	-	0.2
(Metolachlor, Acetochlor)	Metolachlor CGA 368208	n. ev.	520	26	24	2	-	0.4
(Metolachlor)	Metolachlor NOA 413173	n. ev.	479	62	58	13	1	*
(Metolachlor)	Metolachlor-ESA (CGA 354743)	n. rel.	520	101	94	25	-	4.8
(Metolachlor)	Metolachlor-OXA (CGA 51202)	n. rel.	520	29	26	3	-	0.6
Nicosulfuron			51	1	1	-	-	*
(Nicosulfuron)	Nicosulfuron ASDM	n. rel.	179	5	5	-	-	*
(Nicosulfuron)	Nicosulfuron AUSN	n. rel.	369	42	23	-	-	*
(Nicosulfuron)	Nicosulfuron UCSN	n. rel.	520	72	68	3	-	0.6
Oxadixyl			222	1	1	-	-	*
(Pethoxamid)	Pethoxamid MET-42	n. rel.	50	1	1	-	-	*
Prometryn und Terbutryn			9	5	-	-	-	*
Propazin			438	6	-	-	-	*
Simazin			519	35	15	-	-	0.0
Tebuconazol			51	1	-	-	-	*
Terbutylazin			519	13	3	-	-	0.0
(Terbutylazin)	Desethyl-terbutylazin (MT1)	rel.	517	13	2	-	-	0.0
(Terbutylazin)	Terbutylazin LM2	n. rel.	179	1	1	-	-	*
(Terbutylazin)	Terbutylazin LM4	n. rel.	179	2	-	-	-	*
(Terbutylazin)	Terbutylazin LM5	n. ev.	471	75	63	-	-	*
(Terbutylazin)	Terbutylazin LM6	n. rel.	520	84	68	2	-	0.4
Triclopyr			222	1	1	-	-	*
Tritosulfuron			51	1	1	-	-	*

WPO numerical requirement (active substance): 0.1 $\mu\text{g/l}$

LOQ limit of quantitation

(...) active substance of the metabolite

* lack of statistical reliable data at the national scale

** FOAG/ FSVO. Relevanz von Pflanzenschutzmittel-Metaboliten im Grund- und Trinkwasser. State 03/2022

n. ev. not evaluated during the approval procedure

rel. classified as relevant in the approval procedure

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under dispute (interim order of the Federal Administrative Court, 15.01.21), decision pending