Für Mensch & Umwelt

Umwelt Bundesamt

Federal Environment Agency

Announcement
1. Amendment to the list[1] of approved treatment substances and disinfection processes as per § 20 Drinking Water Regulation (Trinkwasserverordnung, TrinkwV)[2]

(As at: January 2025)

Notice is given below of the List of approved treatment substances and disinfection processes as per § 20 of the Drinking Water Regulation. This list enters into force by reference to the TrinkwV or an amending regulation amending the TrinkwV.

1 Introduction

Only those treatment substances (including ions thereof, as long as they are supplied by ion exchange media or electrolysis) and disinfection methods included in this list may be used for the treatment of raw water and drinking water. Exceptions apply with authorisation from the German Environment Agency [UBA], under the preconditions in § 21 TrinkwV.

'"Treatment substances"' are substances and filter media intended to influence the quality of the raw water or the drinking water for the treatment purposes specified in § 18 TrinkwV' (§ 2(7) TrinkwV). Substances used for groundwater

[1] Notified in accordance with Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (OJ L 241, 17/9/2015, p. 1).

[2] Regulation on the quality of water intended for human consumption (Drinking Water Regulation – TrinkwV).

recharge (e.g. slow sand filters) are not within the scope of application of this list.

If multiple suitable treatment substances or products (commercial products or ‘products for the treatment of water intended for human consumption’) are available for the purpose in question, the operator of the water supply system should always use the treatment substances or products that have the lower content of impurities or are of least toxicological concern compared to the alternative products. If multiple comparable disinfection processes are available, the water supply system operator should apply the disinfection process that minimises pollution with undesired byproducts. The respective CO_2 balance should also be taken into account when selecting the treatment agent or product used and the disinfection process. If it is not necessary to maintain the disinfection capacity in the drinking water, the operator must examine alternatives to the addition of chlorine and chlorine dioxide.

In principle, verification that the treatment substances used meet the requirements of this List (such as purity testing) should be based on the European regulatory framework in the standard series ‘Chemicals used for treatment of water intended for human consumption’. The product standards apply in their entirety to ensuring the quality of treatment substances. In principle, the existence of a product standard is a necessary criterion for listing a treatment substance, but not a sufficient one. When testing purity, the German Technical and Scientific Association for Gas and Water [DVGW] Data Sheet W 204 ‘Treatment substances in drinking water production - Rules for selection, procurement and quality assurance’ must also be observed.

Unlisted ion exchange media for the removal of nitrates in domestic water supply systems, filter membrane materials, treatment substances for the formation of calcium carbonate seed crystals and other filter media (e.g. packing) for drinking water treatment that were in use before 2023 may continue to be used under generally recognised codes of practice if the operator can demonstrate their effectiveness. The operator must submit this proof to the health office on request. Moreover, the water supply system operator must ensure that chemical substances with an avoidable or unacceptable health or environmental impact are not transferred from membranes, ion exchange media or other filter media into the treated water.

2 Contents of the List of approved treatment substances and disinfection processes as per § 20 TrinkwV

This List is arranged as follows:

Part I a: Treatment substances used as solutions or gases

Part I b: Treatment substances used as solids

Part I c: Treatment substances used to disinfect water

Part II: Disinfection processes

Part III: Treatment substances used for the needs of the German armed forces under assignment from the Federal Ministry of Defence, for civilian needs in cases of defence under assignment from the Federal Ministry of the Interior and in disaster situations or large-scale emergencies that pose a serious threat to the water supply, with the approval of the competent civil protection authorities

3 Explanatory notes on the columns of the List of approved treatment substances and disinfection processes

– *Substance name*

Designation of the substance as per the relevant product standards for the purity requirements, where such standards are available.

– *CAS number*

Chemical **A**bstracts **S**ervice Registry Number.

– *EINECS number*

European **In**ventory of **E**xisting Commercial **C**hemical **S**ubstances.

– *Purpose*

The intended uses indicated in this table column specify the approved treatment objectives set out in § 18 TrinkwV for the use of treatment substances and disinfection processes.
The following intended uses are permitted:

- Adsorption

- Settling filtration
- Antiscalants for membranes
- Biofiltration
- Biological nitrate removal
- Disinfection
- Adjustment of calcium and magnesium concentration
- Adjustment of calcium and magnesium concentration in the drinking water installation
- Salinity adjustment
- Acid capacity adjustment
- Hydrogen ion concentration (pH value) adjustment
- Chlorine and ozone removal
- Particle removal
- Removal of undesired substances, such as arsenic, lead, iron, manganese, hydrogen sulfide, etc.
- Precipitation
- Filtration
- Flocculation
- Inhibition of corrosion
- Inhibition of limescale deposits in the drinking water installation
- Chlorine production by electrolysis
- Chlorine dioxide production
- Cathodic corrosion protection
- Leak detection in the pipeline system
- Membrane filtration
- Nitrate removal by ion exchange
- Oxidation
- Reduction
- Ion exchange media regeneration
- Sorbent regeneration
- Oxygen enrichment
- Rapid decarbonisation

– *Purity requirements*

The purity requirements refer to the normative part of the applicable technical standards. If a product is standardised in multiple purity classes (types), this List indicates the applicable class (type). This List may also set purity requirements without reference to a standard.

Treatment substances in Part I b that are used in filter systems should not cause any increase in the concentration of chemical substances in drinking water after filter system filling, rinsing and commissioning.

– *Maximum permissible dose*

In setting the permissible doses in the List, the UBA takes the following aspects into account:

Addition of treatment substances during drinking water treatment may not cause an increase in the level of a health-

relevant parameter as per TrinkwV, for which Annex 2 to TrinkwV sets a limit value, by more than 10% of its limit value in the treated water. The dose may not cause the level to exceed the limit value in TrinkwV itself. Thus, for instance, the maximum permissible dose of a treatment substance must also be based on its impurity levels (e.g. heavy metals, monomers), in addition to the technically required amount.

Moreover, this must take into account the reference dose indications of the generally accepted codes of practice and minimisation of chemicals as per § 7(4) TrinkwV.

– ***Maximum concentration after completion of treatment***

The maximum concentration after completion of treatment refers to the actual percentage of the treatment substance used and/or its reaction products. For disinfectants, the List gives maximum and minimum concentrations, pursuant to the statutory requirements.

– ***Relevant reaction products***

Reaction products for which TrinkwV sets a limit value (for example) can be listed in this column.

– ***Comments***

If not listed in another column, the other conditions of use for the treatment substances and the disinfection processes can be specified in this column. Other conditions of use may relate to the place of use, among other things.

4 Scope and frequency of controls and testing

- The applicable control procedures must be based on generally accepted codes of practice. The control frequency and scope are based on the type of treatment substance. The water supply system operator shall carry out checks on the added volume of treatment substance used and analyses of drinking water with regard to the remaining concentration of the treatment substance after completion of treatment in accordance with Table 1. For parameters of the TrinkwV, the control scope and frequency specified therein shall apply at a minimum.

Table 1: Scope and frequency of control and testing for the treatment substance used in accordance with § 20(2)(3), (4) and (5) TrinkwV

a) For treatment substances used for disinfection

Control scope	Control frequency	Documentation	Comments
Control of the added quantity of the treatment substance used	Weekly	Operating log	Does not apply with continuous data control and storage
Testing of drinking water for residual level of the treatment substance after completion of treatment	Daily	System log + test findings	Trained personnel must conduct the daily check. Does not apply with continuous data control and storage

b) For treatment substances with limited maximum concentrations after treatment

Control scope	Control frequency	Documentation	Comments
Control of the added quantity of the treatment substance used	Weekly	Operating log	Does not apply with continuous data control and storage
Testing of drinking water for residual level of the treatment substance after completion of treatment	Weekly	System log + test findings	Does not apply with continuous data control and storage

c) For all other treatment substances (except Table 1(a), (b) and (d))

Control scope	Control frequency	Documentation	Comments
Control of the added quantity of the treatment substance used	Weekly	Operating log	Does not apply with continuous data control and storage

d) For treatment substances to inhibit corrosion and for regenerating salts of ion exchange media to adjust the magnesium and calcium concentration (softening) in the drinking water installation

Control scope	Control frequency	Documentation	Comments
Check on the amount added (as mass in kg) and the volume of water treated with it in m³	With each addition to or refilling of the reservoir	Operating log	Does not apply with continuous data control and storage The amount consumed should fall within a range that meets the manufacturer 's specifications. In addition, the salting efficiency requirement in DIN EN 14743 must be met for ion exchange media regeneration.

5 Procedure for drafting and updating the List of approved treatment substances and disinfection processes

§ 20(5 and 6) TrinkwV set out the procedure for requests to amend this List. Applications must be sent in electronic form to the Federal Environment Agency (Umweltbundesamt), e-mail address trinkwasseraufbereitung@uba.de. The UBA has set down the details of the procedure in a Rule of Procedure as per § 20(7) TrinkwV, which is also published in the Federal Gazette and on the UBA website.

6 Amendments, taking effect in the future, to the List of approved treatment substances and disinfection processes

The following changes are planned according to Table 2.

Table 2: Amendments, taking effect in the future, to the List of approved treatment substances and disinfection processes

Part of this List	Treatment substance, disinfection process, intended use	Amendment

I a	Antiscalants for membranes	For all treatment substances intended for use as ‘antiscalants for membranes’, ‘maximum concentrations after completion of treatment’ shall be specified in the next amendment to the § 20 list, which will be published in advance on the website of the Federal Environment Agency.

List of approved treatment substances and disinfection processes

as per § 20 TrinkwV

As at: January 2025

Part I a

Treatment substances used as solutions or gases

Part I a: Treatment substances used as solutions or gases; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
1	Aluminium chloride, anhydrous[5]	7446-70-0	231-208-1	Flocculation, Precipitation	DIN EN 17034, Table 1: Type 1	9 mg/l Al	Technically unavoidable and technologically ineffective concentrations	-	-
2	Aluminium chloride, basic[5]	1327-41-9 14215-15-7	215-477-2 238-071-7	Flocculation, Precipitation	DIN EN 17034, Table 1: Type 1	9 mg/l Al	Technically unavoidable and technologically ineffective concentrations	-	-
3	Aluminium chloride hydroxide sulphate[5]	39290-78-3	254-400-7	Flocculation, Precipitation	DIN EN 17034, Table 1: Type 1	9 mg/l Al	Technically unavoidable and technologically ineffective concentrations	-	-
4	Aluminium sulphate[5]	10043-01-3 16828-11-8 7784-31-8 16828-12-9 17927-65-0	233-135-0	Flocculation, Precipitation	DIN EN 878, Table 5: non-ferrous and Tab. 6 Type 1	9 mg/l Al	Technically unavoidable and technologically ineffective concentrations	-	CAS number 17927-65-0 does not appear in DIN EN 878.
5	Anionic and non-ionic polyacrylamides[5]	25085-02-3 9003-05-8 9003-04-7	not present	Flocculation	DIN EN 1407 max. 200 mg/kg of acrylamide monomer.	0.5 mg/l	Technically unavoidable and technologically ineffective concentrations	-	The limit value for monomeric acrylamide is deemed to be met if the dose does not exceed the permissible dose of 0.5 mg/l. Free from cationic active groups

Part I a: Treatment substances used as solutions or gases; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
6	Calcium chloride	10043-52-4 10035-04-8	233-140-8	Adjustment of calcium concentration Regeneration of ion exchange media for nickel separation	DIN 19626, Table 4	200 mg/l $CaCl_2$	-	-	-
7	Calcium hydroxide (white lime hydrate)	1305-62-0	215-137-3	Adjustment of hydrogen ion concentration (pH value), salinity, calcium concentration and acid capacity, Regeneration of ion exchange media for nickel separation	DIN EN 12518, Table 2 and 3: Quality A and Table 4: Type 1	100 mg/l $Ca(OH)_2$	-	-	For precipitation softening, max. dose of 350 mg/l[4] The limit values for aluminium and manganese must be observed.
8	Calcium oxide (white lime)	1305-78-8	215-138-9	Adjustment of hydrogen ion concentration (pH value), salinity, calcium concentration and acid capacity	DIN EN 12518 Tab. 2 and 3: Quality A and Table 4: Type 1	100 mg/l CaO	-	-	For precipitation softening, max. dose of 350 mg/l[4] The limit values for aluminium and manganese must be observed.
9	Dipotassium monohydrogen phosphate	7758-11-4	231-834-5	Inhibition of corrosion, Bio. nitrate removal	DIN EN 1202, Table1 and 2	2.2 mg/l P	-	-	-
10	Disodium dihydrogen diphosphate	7758-16-9	231-835-0	Inhibition of corrosion, Bio. nitrate removal	DIN EN 1205, Table1 and 2	2.2 mg/l P	-	-	-
11	Disodium monohydrogen phosphate	7558-79-4	231-448-7	Inhibition of corrosion, Bio. nitrate removal	DIN EN 1199, Table1 and 2	2.2 mg/l P	-	-	-

Part I a: Treatment substances used as solutions or gases; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
12	Iron(II) sulphate[5]	7720-78-7 7782-63-0	231-753-5	Flocculation, Precipitation	Max. impurity for Fe(II): Arsenic 1 mg/kg, Cadmium 1 mg/kg, Chromium 100 mg/kg, Mercury 0.1 mg/kg, Nickel 300 mg/kg, Lead 10 mg/kg, Antimony 10 mg/kg, Selenium 1 mg/kg.	6 mg/l Fe	Technically unavoidable and technologically ineffective concentrations	-	The purity requirements listed separately are from DIN EN 889:2023, Table 2 Type 1.
13	Iron(III) chloride	7705-08-0 10025-77-1	231-729-4	Flocculation, Precipitation	Max. impurity for Fe(III): Arsenic 20 mg/kg, Cadmium 1 mg/kg, Chromium 100 mg/kg, Mercury 0.3 mg/kg, Nickel 120 mg/kg, Lead 35 mg/kg, Antimony 10 mg/kg, Selenium 10 mg/kg.	12 mg/l Fe	Technically unavoidable and technologically ineffective concentrations	-	If extraordinary circumstance significantly change the raw water quality, the operator may temporarily increase the maximum dose if it is ensured that this does not result in any avoidable impact on human health or otherwise prevent achievement of the treatment objective. The purity requirements listed separately are from DIN EN 888:2023, Table 4 type 1 except chromium and nickel

Part I a: Treatment substances used as solutions or gases; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
14	Iron(III) chloride sulphate[5]	12410-14-9	235-649-0	Flocculation, Precipitation	Max. impurity for Fe(III): Arsenic 1 mg/kg, Cadmium 1 mg/kg, Chromium 100 mg/kg, Mercury 0.1 mg/kg, Nickel 300 mg/kg, Lead 10 mg/kg, Antimony 10 mg/kg, Selenium 1 mg/kg.	6 mg/l Fe	Technically unavoidable and technologically ineffective concentrations	-	The purity requirements listed separately are from DIN EN 891:2023, Table 2 Type 1.
15	Iron(III) sulphate[5]	10028-22-5	233-072-9	Flocculation, Precipitation	Max. impurity for Fe(III): Arsenic 1 mg/kg, Cadmium 1 mg/kg, Chromium 100 mg/kg, Mercury 0.1 mg/kg, Nickel 300 mg/kg, Lead 10 mg/kg, Antimony 10 mg/kg, Selenium 1 mg/kg.	6 mg/l Fe	Technically unavoidable and technologically ineffective concentrations	-	The purity requirements listed separately are from DIN EN 890:2023, Table 3 Type 1.
16	Acetic acid	64-19-7	200-580-7	Bio. nitrate removal	DIN EN 13194, Table 2 and Tab. 3		Technically unavoidable and technologically and microbiologically ineffective concentrations	-	It is necessary to ensure aerobic conditions in the water after completion of treatment. The EINECS number does not correspond to DIN EN 13194.

Part I a: Treatment substances used as solutions or gases; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
17	Ethanol	64-17-5	200-57-86	Bio. nitrate removal	DIN EN 13176, Table 2	50 mg/l C_2H_5OH	Technically unavoidable and technologically and microbiologically ineffective concentrations	-	It is necessary to ensure aerobic conditions in the water after completion of treatment.
18	Helium	7440-59-7	231-168-5	Leak detection in the pipeline system	≥ 99.999 % O_2 ≤ 2 ppm N_2 ≤ 3 ppm H_2O ≤ 3 ppm KW ≤ 0.2 ppm	-	-	-	-
19	Potassium permanganate	7722-64-7	231-760-3	Oxidation	DIN EN 12672, Table 2	10 mg/l $KMnO_4$	-	-	-
20	Potassium peroxymonosulphate [Potassium monopersulphate (2 $KHSO_5$, $KHSO_4$, K_2SO_4)]	70693-62-8	274-778-7	Oxidation, Chlorine dioxide production	DIN EN 12678, Table1:Type 1	5.5 mg/l, calculated as H_2O_2	0.1 mg/l, calculated as H_2O_2	-	-
21	Potassium tripolyphosphate	13845-36-8	237-574-9	Inhibition of corrosion, Inhibition of limescale deposits in the drinking water installation	DIN EN 1211, Table1 and 2	2.2 mg/l P	-	-	-
22	Carbon dioxide	124-38-9	204-696-9	Adjustment of hydrogen ion concentration (pH value), salinity, calcium concentration and acid capacity, Ion exchange media regeneration	DIN EN 936 Carbon dioxide must also be free of oils and phenols that may affect the taste of the drinking water.	-	-	-	The pH of the drinking water supplied must be ≥ 6.5 and ≤ 9.5.

Part I a: Treatment substances used as solutions or gases; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
23	Air	-	-	Oxidation, oxygen enrichment, mechanical deacidification by gas exchange, ozone generation	Generally accepted codes of practice	-	-	-	-
24	Manganese(II) chloride x 1 H_2O	64333-01-3	231-869-6	Nickel removal	DIN 19677, Table 5	2 mg/l Mn	-	-	-
25	Monocalcium phosphate	7758-23-8	231-837-1	Inhibition of corrosion, Bio. nitrate removal	DIN EN 1204, Table 1 and 2	2.2 mg/l P	-	-	-
26	Monopotassium dihydrogen phosphate (potassium orthophosphate)	7778-77-0	231-913-4	Inhibition of corrosion, Bio. nitrate removal	DIN EN 1201, Table1 and 2	2.2 mg/l P	-	-	-
27	Monosodium dihydrogen phosphate (sodium orthophosphate)	7558-80-7	231-449-2	Inhibition of corrosion, Bio. nitrate removal	DIN EN 1198, Table1 and 2	2.2 mg/l P	-	-	-
28	Sodium aluminate	11138-49-1	234-391-6	Flocculation	DIN EN 882, Table 2 and Tab. 3: Type 1	2.85 mg/l Al	Technically unavoidable and technologically ineffective concentrations	-	-
29	Sodium carbonate	497-19-8	207-838-8	Adjustment of hydrogen ion concentration (pH value), salinity and acid capacity Ion exchange media regeneration	DIN EN 897, Table1 and 2	250 mg/l Na_2CO_3	-	-	-

Part I a: Treatment substances used as solutions or gases; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
30	Sodium chloride	7647-14-5	231-598-3	Chlorine production by electrolysis Regeneration of ion exchange media in drinking water installations	DIN EN 14805, Table 3: Type 1 DIN EN 973, Table1:Type A and Table 3	-	-	-	-
31	Sodium chlorite	7758-19-2	231-836-6	Chlorine dioxide production	DIN EN 938, Table5, Table 6: Type 1	-	-	-	-
32	Sodium metabisulfite	7681-57-4	231-673-0	Reduction	DIN EN 12121, Table1 The sum of the mass fractions of sodium sulphate and sodium chloride may not exceed 5% (m/m).	5 mg/l SO_3^{2-}	2 mg/l SO_3^{2-}	-	-
33	Sodium hydrogen carbonate	144-55-8	205-633-8	Adjustment of hydrogen ion concentration (pH value), salinity and acid capacity Ion exchange media regeneration	DIN EN 898, Table1 and 2	250 mg/l $NaHCO_3$	-	-	-
34	Sodium hydrogen sulfite	7631-90-5	231-548-0	Reduction	DIN EN 12120, Table 1	5 mg/l SO_3^{2-}	2 mg/l SO_3^{2-}	-	The EINECS number does not correspond to DIN EN 12120.
35	Sodium hydroxide	1310-73-2	215-185-5	Adjustment of hydrogen ion concentration (pH value), salinity, acid capacity and calcium content, Sorbent regeneration	DIN EN 896, Table1 and Table2: Type 1	100 mg/l NaOH	-	-	-
36	Sodium permanganate	10101-50-5	233-251-1	Oxidation	DIN EN 15482	7.5 mg/l MnO_4^-	-	-	-

Part I a: Treatment substances used as solutions or gases; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
37	Sodium persulphate	7775-27-1	231-892-1	Oxidation, Chlorine dioxide production	DIN EN 12926, Table1:Type 1	7.0 mg/l, calculated as H_2O_2	0.1 mg/l, calculated as H_2O_2	-	-
38	Sodium polyphosphate	68915-31-1	272-808-3	Inhibition of corrosion, Inhibition of limescale deposits in the drinking water installation, Antiscalants for membranes	DIN EN 1212, Table1 and 2 DIN EN 15041	2.2 mg/l P	-	-	–
39	Sodium silicate	1344-09-8	215-687-4	Inhibition of corrosion	DIN EN 1209, Table 1	15 mg/l SiO_2	-	-	Only use in mixtures with phosphates, sodium hydroxide, sodium carbonate or sodium hydrogen carbonate listed here.
40	Sodium sulfite	7757-83-7	231-821-4	Reduction	DIN EN 12124, Table 1 The mass fraction of iron in the product may not exceed 25 mg/kg.	5 mg/l SO_3^{2-}	2 mg/l SO_3^{2-}	-	-
41	Sodium thiosulphate	7772-98-7 10102-17-7	231-867-5	Reduction	DIN EN 12125, Table 1 The mass fraction of sodium sulphate in the product may not exceed 5%.	7 mg/l $S_2O_3^{2-}$	3 mg/l $S_2O_3^{2-}$	-	-
42	Sodium tripolyphosphate	7758-29-4	231-838-7	Inhibition of corrosion, Inhibition of limescale deposits in the drinking water installation, Antiscalants for membranes	DIN EN 1210, Table1 and 2	2.2 mg/l P	-	-	-

Part I a: Treatment substances used as solutions or gases; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
43	Ozone	10028-15-6	233-069-2	Oxidation, Disinfection	DIN EN 1278, Annex A.3.2	10 mg/l O_3	0.05 mg/l O_3	Trihalogen methanes, bromate	See also List Part I c.
44	Phosphonic acids	6419-19-8 22042-96-2 32545-75-8 2809-21-4 15827-60-8 1429-50-1 5995-42-6 37971-36-1 23605-74-5	229-146-5 244-751-4 251-094-7 220-552-8 239-931-4 215-851-5 227-833-4 253-733-5 245-781-0	Antiscalants for membranes	DIN EN 15040	2.5 mg/l of dry product mass	-	-	-
45	Phosphoric acid	7664-38-2	231-633-2	Biol. Nitrate removal	DIN EN 974, Table 1	5 mg/l P	Technically unavoidable and technologically and microbiologically ineffective concentrations	-	It is necessary to ensure aerobic conditions in the water after completion of treatment.
46	Polyaluminium chloride hydroxide[5]	1327-41-9 12042-91-0 10284-64-7	215-477-2 234-933-1 233-632-2	Flocculation, Precipitation	DIN EN 17034, Table 1: Type 1	9 mg/l Al	Technically unavoidable and technologically ineffective concentrations	-	-
47	Polyaluminium hydroxide chloride silicate[5]	94894-80-1	-	Flocculation, Precipitation	DIN EN 885, Table 1: Type 1	9 mg/l Al	Technically unavoidable and technologically ineffective concentrations	-	-

Part I a: Treatment substances used as solutions or gases; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
48	Polyaluminium hydroxide chloride sulphate[5]	39290-78-3	254-400-7	Flocculation, Precipitation	DIN EN 17034, Table 1: Type 1	9 mg/l Al	Technically unavoidable and technologically ineffective concentrations	-	-
49	Polyaluminium hydroxide silicate sulphate[5]	131148-05-5	-	Flocculation, Precipitation	DIN EN 886, Table 1: Type 1	9 mg/l Al	Technically unavoidable and technologically ineffective concentrations	-	-
50	Polycarboxylic acids	9003-01-4 9003-06-9 29132-58-9	-	Antiscalants for membranes	DIN EN 15039	2.5 mg/l of dry product mass	-	-	-
51	Hydrochloric acid	7647-01-0	231-595-7	Adjustment of hydrogen ion concentration (pH value), salinity and acid capacity sorbent regeneration, chlorine dioxide production	DIN EN 939, Table4 and Table5: Type 1	250 mg/l HCl	-	-	The limit value for chloride must be observed (concentration in the raw water + dosage).
52	Oxygen	7782-44-7	231-956-9	Oxidation, Oxygen enrichment	DIN EN 12876 The hydrocarbon content (as a Methane Number) must be less than 50 ppm (v/v).	-	-	-	Not higher than O_2 saturation
53	Sulphur dioxide	7446-09-5	231-195-2	Reduction	DIN EN 1019, Table 1	5 mg/l SO_3^{2-}	2 mg/l SO_3^{2-}	-	-

Part I a: Treatment substances used as solutions or gases; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
54	Sulfuric acid	7664-93-9	231-639-5	Adjustment of hydrogen ion concentration (pH value), salinity and acid capacity Sorbent regeneration	DIN EN 899, Table 1	240 mg/l H_2SO_4	-	-	The limit value for sulphate must be observed (concentration in the raw water + dosage).
55	Tetrapotassium diphosphate	7320-34-5	230-785-7	Inhibition of corrosion, Bio. nitrate removal	DIN EN 1207, Table1 and 2	2.2 mg/l P	-	-	-
56	Tetrasodium diphosphate	7722-88-5	231-767-1	Inhibition of corrosion, Bio. nitrate removal	DIN EN 1206, Table1 and 2	2.2 mg/l P	-	-	-
57	Tripotassium phosphate	7778-53-2	231-907-1	Inhibition of corrosion, Bio. nitrate removal	DIN EN 1203, Table1 and 2	2.2 mg/l P	-	-	-
58	Trisodium phosphate	7601-54-9 10101-89-0	231-509-8	Inhibition of corrosion, Bio. nitrate removal	DIN EN 1200, Table 1 and 2 for the anhydrous product	2.2 mg/l P	-	-	-
59	Hydrogen	1333-74-0	215-605-7	Bio. nitrate removal	Purity: ≥ 99.999% by volume of residue (ppmv): ≤ 0.5 C_nH_m Purity ≥ 99.9% by volume for O_2, N_2, H_2O	-	-	-	It is necessary to ensure aerobic conditions in the water after completion of treatment.
60	Hydrogen peroxide	7722-84-1	231-765-0	Oxidation	DIN EN 902, Table 7: Type 1	17 mg/l H_2O_2	0.1 mg/l H_2O_2	-	-

Key:

3	Including concentrations before treatment and from other treatment steps
4	If there is a technical need to increase the maximum permissible dose in individual cases, e.g. under certain raw water conditions, the necessary documents on the higher quality treatment substance to demonstrate compliance with the 10% rule must be submitted to the competent supervisory authority and the UBA in advance.
5	If there is a technical need in individual cases, e.g. under certain raw water conditions, to increase the maximum flocculant or flocculating agent dosage *for a specific system*, the operator must first provide the competent supervisory authority and the UBA with the required documents to demonstrate compliance with the 10% rule.
-	not specified
biol.	biological
CAS	Chemical Abstracts Service
EINECS	European Inventory of Existing Commercial Chemical Substances
max.	maximum
Tab.	Table

List of approved treatment substances and disinfection processes

as per § 20 TrinkwV

As at: January 2025

Part I b

Treatment substances used as solids

Part I b: Treatment substances used as solids[6]; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
1	Activated charcoal, granulated	7440-44-0	231-153-3	Adsorption, chlorine and ozone removal, biofiltration, Particle removal	DIN EN 12915-1, Tables 1 and 2	-	-	-	-
2	Activated charcoal, powdered	7440-44-0	231-153-3	Adsorption	DIN EN 12903, Table1 and 2	-	-	-	-
3	Alumina, activated, granulated	1344-28-1	215-691-6	Adsorptive fluoride removal	DIN EN 13753	-	-	-	The limit value for aluminium must be observed.
4	Aluminium silicates, expanded (expanded clay)	-	-	Particle removal, biofiltration	DIN EN 12905	-	-	-	The limit value for aluminium must be observed.
5	Aluminium silicates, naturally unexpanded	-	-	Particle removal	DIN EN 15795	-	-	-	The limit value for aluminium must be observed.
6	Anthracite	-	-	Particle removal, Chlorine and ozone removal	DIN EN 12909, Table 1	-	-	-	-
7	Bentonite	1302-78-9	215-108-5	Particle removal	DIN EN 13754, Table 1	-	-	-	-
8	Pumice	-	-	Particle removal	DIN EN 12906	-	-	-	-
9	Calcium carbonate	1317-65-3 471-34-1	215-279-6 207-439-9	Particle removal, Adjustment of hydrogen ion concentration (pH value), salinity, calcium concentration and acid capacity, iron and manganese removal	DIN EN 1018, Table 2: Quality 1, and Table 3: Type A	100 mg/l $CaCO_3$	-	-	For precipitation softening, max. dose of 350 mg/l[4]
10	Calcium magnesium carbonate	16389-88-1	240-440-2	Particle removal, iron and manganese removal	DIN EN 16003	100 mg/l $CaCO_3$	-	-	-

Part I b: Treatment substances used as solids[6]; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
11	Divinylbenzene-methacrylic acid copolymer	50602-21-6	-	Adjustment of calcium and magnesium concentration	§ 14 and § 15 TrinkwV	-	-	-	Ion exchange with CO_2 regeneration
12	Divinylbenzene-styrene-ethylstyrene copolymer with sulfonic acid groups in sodium form	69011-22-9	-	Adjustment of calcium and magnesium concentration in the drinking water installation	§ 14 and § 15 TrinkwV	-	-	-	The replacement medium must be disinfected in accordance with generally accepted codes of practice (DIN 19636-100 in particular) within no more than three days.
13	Dolomite, half-burnt	83897-84-1	281-192-5	Particle removal, Adjustment of hydrogen ion concentration (pH value), calcium content and acid capacity, iron and manganese removal	DIN EN 1017, Table 2 and Tab. 3 type A	100 mg/l $CaCO_3$	-	-	-
14	Iron(III) oxide hydroxide	51274-00-1	257-098-5	Adsorptive removal of arsenic, lead, vanadium	DIN EN 15029 Arsenic < 70 mg/kg DM	-	-	-	-
15	Iron-coated activated alumina	Activated alumina: 1344-28-1 Iron(III) sulphate: 100028-22-5	Activated alumina: 215-691-6 Iron(III) sulphate: 233-072-9	Adsorptive arsenic removal	DIN EN 14369	-	-	-	-
16	Garnet sand			Particle removal, Rapid decarbonisation	DIN EN 12910	-	-	-	-
17	Infusorial earth	61790-53-2 91053-39-3 68855-54-9	293-303-4	Settling filtration	DIN EN 12913, Table 1	-	-	-	CAS number 91053-39-3 does not correspond to DIN EN 12913.
18	Magnesium, solid	7439-95-4	231-104-6	Cathodic corrosion prevention;	DIN 4753-3 DIN EN 12438	-	-	-	Use of magnesium as a sacrificial anode in hot water applications

Part I b: Treatment substances used as solids[6]; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
19	Magnesium oxide	1309-48-4	215-171-9	Adjustment of hydrogen ion concentration (pH value), acid capacity and magnesium content	DIN EN 16004	100 mg/l MgO	-	-	The pH value must be observed when filling and refilling filters.
20	Manganese dioxide	1313-13-9	215-202-6	Manganese removal	DIN EN 13752	-	-	-	It is also permitted to use products with a mass fraction of manganese dioxide of over 78%.
21	Manganese dioxide-coated limestone	Calcium carbonate: 471-34-1 Manganese dioxide: 1313-13-9	Calcium carbonate:207-439-9 Manganese dioxide: 215-202-6	Particle removal, iron and manganese removal, hydrogen sulfide removal	DIN EN 14368	-	-	-	Manganese concentration increase not permitted at filter outlet
22	Manganese greensand (manganese zeolite, iron sand, greensand)	Glauconite: 90387-66-9 Manganese dioxide: 1313-13-9	Glauconite: 291-341-6 Manganese dioxide: 215-202-6	iron and manganese removal, hydrogen sulfide removal	DIN EN 12911, Table 1	-	-	-	Zeolite coated with manganese oxide (glauconite); increase in manganese concentration not permitted at filter outlet
23	Modified tertiary amine acrylic copolymer	-	-	Uranium removal	§ 14 and § 15 TrinkwV	-	-	-	DIN EN standardisation in progress; The radiation protection regulations must be observed during operation and disposal.
24	Natural basaltic zeolite	1318-02-1	215-283-8	Manganese, iron, radium removal	DIN EN 16070	-	-	-	The radiation protection regulations must be observed during operation and disposal.
25	Natural zeolite - clinoptilolite	1318-02-1 12173-10-3 12271-42-0	215-283-8	Manganese, iron, radium removal	DIN EN 16070	-	-	-	The radiation protection regulations must be observed during operation and disposal.
26	Perlite, powdered	-	-	Settling filtration	DIN EN 12914, Table 1	-	-	-	-

Part I b: Treatment substances used as solids[6]; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Maximum concentration after completion of treatment[3]**	**Relevant reaction products**	**Comments**
27	Poly (methyl acrylate -c^{o-} (N, N, N-trimethyl, N-chloro) propyl acrylamide) copolymer	65997-24-2	-	Adjustment of acid capacity, removal of nitrate and sulphate	§ 14 and § 15 TrinkwV	-	-	-	Ion exchange with CO_2 regeneration
28	Quartz sand and quartz gravel (silicon oxide)	-	-	Particle removal, sedimentation, iron and manganese removal, biofiltration, Rapid decarbonisation	DIN EN 12904, Table1, Types 1 and 2	-	-	-	Systems that are operated with (e.g. natural) sands that were introduced into plants before 2001 may continue to be operated there. A listed treatment substance must be used for refilling or top-ups. Slow sand filters are exempt from this rule.
29	Styrene divinylbenzene copolymer with iminodiacetic acid groups	135620-93-8	-	Nickel removal	§ 14 and § 15 TrinkwV	-	-	-	DIN EN Standardisation in progress
30	Styrene divinylbenzene copolymer with trialkylammonium groups		-	Uranium removal	§ 14 and § 15 TrinkwV	-	-	-	DIN EN standardisation in progress; The radiation protection regulations must be observed during operation and disposal.
31	Thermally treated coal products	-	-	Particle removal	DIN EN 12907, Table1 and 2	-	-	-	-

Key:

3 Including concentrations before treatment and from other treatment steps

4 If there is a technical need to increase the maximum permissible dose in individual cases, e.g. under certain raw water conditions, the necessary documents on the higher quality treatment substance to demonstrate compliance with the 10% rule must be submitted to the competent supervisory authority and the UBA in advance.

6 For granular inorganic filter medium, the test method described in DIN EN 12902 for the determination of water-extractable chemical substances can be used to estimate potential leaching of the filter medium in chemical substances. The aforementioned edition of DIN EN 12902 is available from DIN Media and is securely archived at the German National Library in Leipzig.

-	not specified
a. a. R. d. T.	Allgemein anerkannte Regeln der Technik [Generally accepted codes of practice]
biol.	biological
CAS	Chemical Abstracts Service
EINECS	European Inventory of Existing Commercial Chemical Substances
max.	maximum
min.	minimum
Tab.	Table
DM	Dry matter

List of approved treatment substances and disinfection processes

as per § 20 TrinkwV

As at: January 2025

Part I c

Treatment substances used to disinfect water

Part I c: Treatment substances used to disinfect water; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Concentration range after completion of treatment[3]**	**Relevant reaction products**	**Comments**
1	Calcium hypochlorite	7778-54-3	231-908-7	Disinfection	DIN EN 900, Table1: Type 1	1.2 mg/l Free Cl_2	Max. 0.3 mg/l Free Cl_2 Min. 0.1 mg/l Free Cl_2	Trihalogen methanes, bromate, Chlorate	Addition of up to 4.7 mg/l of free Cl_2 and concentrations of up to 0.6 mg/l of free Cl_2 after treatment are not considered if disinfection cannot be guaranteed otherwise or if disinfection is temporarily affected by ammonium. The limit value for bromate must be observed. The following maximum values apply for chlorate: - 70 µg/l for permanent dosage (dose of up to 1.2 mg/l Cl_2). The 10% rule does not apply if disinfection cannot be guaranteed otherwise. - 200 µg/l for temporary addition if disinfection cannot be guaranteed otherwise. - 700 µg/l for temporary incidents, up to 4.7 mg/l Cl_2. When calcium hypochlorite is used, the action is caused by HOCl and OCl^-.
2	Chlorine	7782-50-5	231-959-5	Disinfection, Chlorine dioxide production	DIN EN 937, Table 1 For chlorine production using the amalgam process: max. Hg content 0.1 mg/kg Cl_2	1.2 mg/l Free Cl_2	Max. 0.3 mg/l Free Cl_2 Min. 0.1 mg/l Free Cl_2	Trihalomethanes	Addition of up to 6 mg/l of free Cl_2 and concentrations of up to 0.6 mg/l of free Cl_2 after treatment are not considered if disinfection cannot be guaranteed otherwise or if disinfection is temporarily affected by ammonium. When chlorine is used, the action is caused by HOCl and OCl^-.

Part I c: Treatment substances used to disinfect water; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Concentration range after completion of treatment[3]**	**Relevant reaction products**	**Comments**
3	Chlorine dioxide	10049-04-4	233-162-8	Disinfection	DIN EN 12671 Only information on source materials (EN 937, 938, 939, 12678, 12926)	0.4 mg/l ClO_2	Max. 0.2 mg/l ClO_2 Min. 0.05 mg/l ClO_2	Chlorite, Chlorate	After completion of treatment, a maximum chlorite level of 0.2 mg/l ClO_2^- must be observed. The chlorite value is deemed to be met if no more than 0.2 mg/l of chlorine dioxide is added. Bear in mind possible chlorate formation. The following maximum values apply for chlorate: - 70 µg/l for permanent dosage (dose of up to 0.4 mg/l ClO_2). The 10% rule does not apply if disinfection cannot be guaranteed otherwise. 200 µg/l for temporary addition if disinfection cannot be guaranteed otherwise.
4	Sodium hypochlorite	7681-52-9	231-668-3	Disinfection	DIN EN 901, Table1: Type 1 Upon delivery from the supplier, the content of sodium chlorate ($NaClO_3$) or chlorate (ClO_3) may not exceed 5.4% or 4.22% by weight of the active chlorine content, respectively.	1.2 mg/l Free Cl_2	Max. 0.3 mg/l Free Cl_2 Min. 0.1 mg/l Free Cl_2	Trihalogen methanes, bromate, Chlorate	Addition of up to 5.1 mg/l of free Cl_2 and concentrations of up to 0.6 mg/l of free Cl_2 after treatment are not considered if disinfection cannot be guaranteed otherwise or if disinfection is temporarily affected by ammonium. The limit value for bromate must be observed. The following maximum values apply for chlorate: - 70 µg/l for permanent dosage (dose of up to 1.2 mg/l Cl_2). The 10% rule does not apply if disinfection cannot be guaranteed otherwise. - 200 µg/l for temporary addition if disinfection cannot be guaranteed otherwise. - 700 µg/l for temporary incidents, up to 5.1 mg/l Cl_2. When sodium hypochlorite is used, the action is caused by HOCl and OCl^-.

Part I c: Treatment substances used to disinfect water; as at January 2025									
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Concentration range after completion of treatment[3]**	**Relevant reaction products**	**Comments**
5	Ozone	10028-15-6	233-069-2	Disinfection, Oxidation	DIN EN 1278, Annex A.3.2	10 mg/l O_3	≤ 0.05 mg/l O_3	Trihalogen methanes, bromate	See also List Part I a.

Key:

3	Including concentrations before treatment and from other treatment steps
CAS	Chemical Abstracts Service
EINECS	European Inventory of Existing Commercial Chemical Substances
max.	maximum
min.	minimum
Tab.	Table

List of approved treatment substances and disinfection processes

as per § 20 TrinkwV

As at: January 2025

Part II

Disinfection processes

Part II: Disinfection processes; as at January 2025						
Serial number	**Disinfection process[7]**	**Purpose**	**Technical rules**	**Minimum exposure time**	**Process requirements**	**Comments**
1	Dosing of a chlorine dioxide solution not produced on-site, using a chlorite/peroxydisulphate process	Disinfection	DVGW Data Sheets W 224	DVGW Data Sheet W 224	-	-
2	Dosing of a chlorine dioxide solution produced on-site, using a chlorite/chlorine process	Disinfection	DVGW Data Sheets W 224, W 624	DVGW Data Sheet W 224	-	-
3	Dosing of a chlorine dioxide solution produced on-site, using a chlorite/hydrochloric acid process	Disinfection	DVGW Data Sheets W 224, W 624	DVGW Data Sheet W 224	-	-
4	Dosing of a chlorine dioxide solution produced on-site, using a chlorite/peroxydisulphate process	Disinfection	DVGW Data Sheets W 224, W 624	DVGW Data Sheet W 224	-	-
5	Dosing of chlorine gas solutions	Disinfection	DVGW Data Sheets W 229, W 296, W 623	DVGW Data Sheet W 229	Use of expanded vacuum chlorine gas dosing systems	When using the process outside the waterworks, the operator must ensure compliance with the trihalogen methane (THM) limit for the consumer.
6	Dosing of sodium hypochlorite solution	Disinfection	DVGW Data Sheets W 229, W 296, W 623	DVGW Data Sheet W 229	-	When using the process outside the waterworks, the operator must ensure compliance with the trihalogen methane (THM) limit for the consumer.
7	Dosing of calcium hypochlorite solution	Disinfection	DVGW Data Sheets W 229, W 296, W 623	DVGW Data Sheet W 229	-	When using the process outside the waterworks, the operator must ensure compliance with the trihalogen methane (THM) limit for the consumer.

Part II: Disinfection processes; as at January 2025						
Serial number	**Disinfection process[7]**	**Purpose**	**Technical rules**	**Minimum exposure time**	**Process requirements**	**Comments**
8	Electrolytic production and dosing of chlorine gas, chlorine solutions and sodium hypochlorite solutions onsite	Disinfection	DVGW Data Sheets W 229, W 296, W 623	DVGW Data Sheet W 229	-	When using the process outside the waterworks, the operator must ensure compliance with the trihalogen methane (THM) limit for the consumer.
9	Onsite production and dosing of ozone and ozone solution	Disinfection, Oxidation	DVGW Data Sheets W 225, W 296, W 625	DVGW Data Sheet W 225	-	When using the process outside the waterworks with raw water containing bromide, the operator must ensure compliance with the trihalogen methane (THM) limit for the consumer. The disinfection process cannot be used to maintain disinfection capacity when distributing the drinking water.
10	UV irradiation (240-290 nm)	Disinfection	DVGW Data Sheets W 294-1, W 294-2, W 294-3 DIN 19294-1:2020 (identical to ÖNORM M 5873-1:2020), DIN 19294-2 DIN 19294-3:2020 (identical to ÖNORM M 5873-3:2020) DIN 19294-4 *Editorial note: The DIN 19294-2 and DIN 19294-4 standards are expected to be published as a draft (yellow print) in July 2025.*	System-specific	It is only permitted to use UV disinfection equipment with a disinfection efficiency of at least 400 joules/m^2 (for 254 nm), demonstrated in a biodosimetric test as per DVGW Data Sheet W 294-2, DIN 19294-1:2020 (identical to ÖNORM M 5873-1:2020) or DIN 19294-2. A UV disinfection device must have a valid type examination certificate at the time of initial commissioning. The operating parameters (in particular maximum flow and associated minimum irradiance) specified for the device in the test report and in the type examination certificate issued by an accredited industry certifier must be complied with during operation.	The disinfection process cannot be used to maintain disinfection capacity when distributing the drinking water.

Key:

7	When using the disinfection process on surface water or water influenced by surface water, the operator must ensure maximum particle separation before disinfection. In this process, the operator should strive for turbidity values in the range of 0.1 to 0.2 NTU in the outlet of the particle separation step, and lower than this where possible. Express reference is made to the German Environment Agency's communication: *'Requirements for the treatment of surface waters into drinking water with regard to the elimination of parasites'* (published in the Federal Health Gazette 12/97).
-	not specified

List of treatment substances and disinfection processes

as per § 20 TrinkwV

As at: January 2025

Part III

Treatment substances used for the needs of the German armed forces under assignment from the Federal Ministry of Defence, for civilian needs in cases of defence under assignment from the Federal Ministry of the Interior and in disaster situations or large-scale emergencies that pose a serious threat to the water supply, with the approval of the competent civil protection authorities

Part III: Treatment substances used as disinfectants and oxidants; as at January 2025							
Serial number	**Substance name**	**CAS number**	**EINECS number**	**Purpose**	**Purity requirements**	**Maximum permissible dose**	**Comments**
1	Calcium hypochlorite	7778-54-3	231-908-7	Disinfection, Oxidation	DIN EN 900	≤ 260 mg/l free chlorine[9]	In specific hazardous situations, the competent authority may set a minimum free chlorine concentration after completion of treatment.
2	Sodium dichloroisocyanurate[8]	2893-78-9	220-767-7	Disinfection	DIN EN 12931	26 mg/l Free chlorine	The permissible dose is 40 mg/l for sodium dichloroisocyanurate.
3	Sodium dichloroisocyanurate dihydrate[8]	51580-86-0	220-767-7	Disinfection	DIN EN 12932	26 mg/l Free chlorine	The permissible dose is 46.7 mg/l for sodium dichloroisocyanurate dihydrate.
4	Sodium hypochlorite	7681-52-9	231-668-3	Disinfection, Oxidation	DIN EN 901	≤ 260 mg/l free chlorine[9]	In specific hazardous situations, the competent authority may set a minimum free chlorine concentration after completion of treatment.

Key:

8 This treatment substance may be used in tablet form.

It is only permitted to place tablets on the market if their packaging, containers or other wrapping bears clearly visible, easily legible and indelible indications of the following, in German:

1. the amount of sodium dichloroisocyanurate or sodium dichloroisocyanurate dihydrate contained in each tablet in mg,
2. the amount of water that a tablet can disinfect, in litres,
3. instructions for use, including the dosage, the exposure time that must pass before using the water and the use-by date for the disinfected water,
4. the batch designation, indicating at least the month and year of production.

If providing tablets out of their packaging, containers or other wrappings to consumers, the operator may also hand out accompanying leaflets with the indications as per points 1 to 3. Stocks of tablets from before entry into force of the First Regulation amending the TrinkwV (1 November 2011) meet the requirements of this List.

Tableting excipients must be suitable to guarantee tablet stability and must meet the requirements of the Pharmacopoeia and the Additives Admission Regulation [ZVerkV].

9 The free chlorine level is determined from the disinfectant dosage, e.g. based on the unit dosage plan of the German armed forces.

Berlin, xx. xx 2025

Federal Environment Agency
pp.
Dr. Andreas Grunert

Management of the office for maintaining the list of approved treatment substances and disinfection processes as per § 20 TrinkwV