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Joint Committee on Drinking Water Additives – Treatment Chemicals
Joint Committee on Drinking Water Additives – System Components

5/17/2024

Proposed revision to NSF/ANSI/CAN 600 – Health Effects Evaluation and Criteria for Chemicals in Drinking Water (600i9r1)

Revision 1 of NSF/ANSI/CAN 600, issue 9 is being forwarded to the Joint Committee for consideration. Please review the proposal and **submit your ballot by June 7, 2024** via the NSF Online Workspace.

Please review all ballot materials. When adding comments, please include the section number applicable to your comment and add all comments under one comment number whenever possible. If you need additional space, please use the attached blank comment template in the reference documents and upload online via the browse function.

Purpose

This ballot includes general criteria updates to Table 4.1.

Background

Updates to the drinking water criteria are based on the continued efforts of the Health Advisory Board (HAB) and the Joint Peer Steering Committee (JPRSC). New contaminants, as well as changes made to existing contaminants are shown in the ballot using strikeout for removal of old text and gray highlights to show the updated text.

If you have any questions about the technical content of the ballot, you may contact me in care of:

France Lemiuex, Chair, Joint Committee on Drinking Water Additives
c/o Amy Jump, Joint Committee Secretariat
T (313) 426-4918
E ajump@nsf.org@nsf.org

[Note – the recommended changes to the standard which include the current text of the relevant section(s) indicate deletions by use of ~~strikeout~~ and additions by grey highlighting. Rationale Statements are in *italics* and only used to add clarity; these statements will NOT be in the finished publication.]

NSF/ANSI Standard
for Drinking Water Additives –

Health Effects Evaluation and Criteria for Chemicals in Drinking Water

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Table 4.1
Drinking water criteria
(previously NSF/ANSI 60 Annex C, NSF/ANSI 61 Annex D)

Substance	CAS#	MCL/MAC or TAC (mg/L)	SPAC (mg/L)	STEL (mg/L)	Source of supporting documentation [1, 2, 3, 4, 5, 6, 7]	Additional information
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2,3-dichlorobenzoic acid	50-45-3	0.003	0.0003	0.01	TOE	—
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1,2,3,6-tetrahydrophthalimide	85-40-5	0.003	0.0003	0.1	TOE	—
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methylene diphenyl diisocyanate	101-68-8	0.01 ~~0.003~~	0.01 ~~0.0003~~	— ~~0.01~~	NSF action level JPRSC consensus date: 2023-08-08 ~~TOE~~	—
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triacetin	102-76-1	0.01 ~~0.003~~	0.01 ~~0.0003~~	— ~~0.01~~	NSF action level JPRSC consensus date: 2023-04-07 ~~TOE~~	—
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1,4-cyclohexanedimethanol	105-08-8	0.003	0.0003	0.01	TOE	—
2-hexanone, 4-methyl-	105-42-0	0.003	0.0003	0.01	TOE	—
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~~propylene carbonate~~	~~108-32-7~~	~~0.003~~	~~0.0003~~	~~0.01~~	~~TOE~~	~~—~~
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Substance	CAS#	MCL/MAC or TAC (mg/L)	SPAC (mg/L)	STEL (mg/L)	Source of supporting documentation [1, 2, 3, 4, 5, 6, 7]	Additional information
isocyanuric acid	108-80-5	40	20	60	NSF action level. External peer review date: 2004-03-01	—
4-heptanone, 2,6-dimethyl-	108-83-8	0.003	0.0003	0.01	TOE	—
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acetic acid, propyl ester	109-60-4	1 ~~0.01~~	0.1 ~~0.01~~	30 ~~—~~	NSF action level. External peer review date: 2021-05-21 ~~NSF action level.~~ ~~JPRSC consensus date: 2018-11-05~~	—
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isobutyl acetate	110-19-0	2 ~~0.01~~	0.2 ~~0.01~~	8 ~~—~~	NSF action level. External peer review date: 2022-05-24 ~~WQA action level.~~ ~~JPRSC consensus date: 2018-04-04~~	—
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1,4-butanediol	110-63-4	0.5 ~~0.6~~	0.05 ~~0.06~~	2	NSF action level. External peer review date: 2017-04-18 JPRSC consensus date: 2023-04-11	—
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~~ethanol, 2,2'-oxybis-~~	~~111-46-6~~	~~0.003~~	~~0.0003~~	~~0.01~~	~~TOE~~	~~—~~
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formic acid, octyl ester	112-32-3 ~~112-32-4~~	0.003	0.0003	0.01	TOE	—
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dimethyl ether	115-10-6	0.003	0.003	0.01	TOE	—
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benzyl benzoate	120-51-4	0.003	0.0003	0.01	TOE	—
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cyclopentanone	120-92-3	8 ~~0.003~~	0.8 ~~0.0003~~	8 ~~0.01~~	NSF action level. External peer review date: 2019-05-21 ~~TOE~~	—
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malathion	121-75-5	0.29 ~~0.19~~	0.029 ~~0.019~~	—	Health Canada MAC. Issue date: ~~1986-02-~~2021-03-26	—
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triisopropanolamine	122-20-3	0.01 ~~0.003~~	0.01 ~~0.0003~~	— ~~0.01~~	NSF action level. JPRSC consensus date: 2023-07-11 ~~TOE~~	—
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isoamyl alcohol	123-51-3	0.003	0.0003	0.01	TOE	—
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1,4-dioxane	123-91-1	0.05	0.005	—	Health Canada MAC. Issue date: ~~2018-09-07-~~2021-03-26	—
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butyl carbitol acetate	124-17-4	0.01 ~~0.003~~	0.01 ~~0.0003~~	— ~~0.01~~	NSF action level. JPRSC consensus date: 2023-06-14 ~~TOE~~	—
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Substance	CAS#	MCL/MAC or TAC (mg/L)	SPAC (mg/L)	STEL (mg/L)	Source of supporting documentation [1, 2, 3, 4, 5, 6, 7]	Additional information
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tetrahydroxyethylenediamine	140-07-8	0.003	0.0003	0.01	TOE	—
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cyclooctanone	502-49-8	0.003	0.003	0.01	TOE	—
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benzoquinone, 2,6-dimethyl-1,4-	527-61-7 ~~517-61-7~~	0.003	0.0003	0.01	TOE	—
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benzenemethanol, 4-(1-methylethyl)-	536-60-7	0.003	0.0003	0.001	TOE	—
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4-chloroanisole	623-12-1	0.003	0.0003	0.01	TOE	—
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~~urea, N, N', N'-trimethyl-~~	~~623-14-4~~	~~0.003~~	~~0.0003~~	~~0.01~~	~~TOE~~	~~—~~
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isophthalaldehyde	626-19-7	0.003	0.0003	0.01	TOE	—
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phenol, 2-propyl-	644-35-9	0.003	0.0003	0.01	TOE	—
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1,2-cyclohexanedione	765-87-7	0.003	0.0003	0.01	TOE	—
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dioxacyclododecane-7,12-dione, 1,6-	777-95-7	1 ~~0.05~~	0.1 ~~0.05~~	4 ~~—~~	NSF action level JPRSC consensus date~~:~~ 2023-04-11 ~~WQA action level.~~ ~~JPRSC consensus date: 2016-08-17~~	If detected alone, use these criteria as described. If detected with 1,4-butanediol (CAS# 110-63-4), the criteria for 1,4-butanediol should be applied after adjusting the detection of CAS# 777-95-7 by a factor of 0.45 (detection x 0.45) and then summing with the detection for CAS# 110-63-4; See Section 4.7 for details on the summation calculation. ~~—~~
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1,2-decanediol	1119-86-4 ~~1119-86-5~~	0.003	0.0003	0.01	TOE	—
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N,N-dimethyl-N-decylamine	1120-24-7	0.003	0.0003	0.01	TOE	
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sorbitan monopalmitate	26266-57-9 ~~1338-40-5~~	—	0.05 (total)	—	NSF action level. Issue date: 1996-12	Detections shall be summed with the following chemical: CAS# 1338-41-6.
sorbitan monostearate	1338-41-6	—	0.05 (total)	—	NSF action level. Issue date: 1996-12	Detections shall be summed with the following chemical: CAS# ~~1338-40-5.~~ 26266-57-9
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capric dimethyl amine oxide	2605-79-0	0.003	0.0003	0.01	TOE	—
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butyl pyrrolidinone	3470-98-2	0.003	0.0003	0.01	TOE	—
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2,5-tetrahydrodipropylfuran	4457-62-9 ~~4457-62-8~~	0.003	0.0003	0.01	TOE	—

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2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4	0.003	0.0003	0.01	TOE	—
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N-(4-chlorophenyl)benzenesulfonamide	4750-28-1	0.003	0.0003	0.01	TOE	—
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benzaldehyde, 3,5-dimethyl-	5779-95-3 ~~5799-95-3~~	0.003	0.0003	0.01	TOE	—
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3,4-dimethylbenzyl alcohol	6966-10-5	0.003	0.0003	0.01	TOE	—
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1-decanamine, N-decyl-N-methyl-	7396-58-9	0.003	0.0003	0.01	TOE	—
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sodium	7440-23-5	20	2	—	NSF action level. JPRSC consensus date: 2023-03-08	—
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cesium	7440-46-2	0.02 ~~0.003~~	0.002 ~~0.0003~~	— ~~0.01~~	NSF action level. External peer review date: 2023-05-24 ~~TOE~~	—
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benzamide, N-propyl-	10546-70-0	0.003	0.0003	0.01	TOE	—
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2,2-bis-(4-(2-methacryloxyethoxy)phenyl)propane	24448-20-2	0.003	0.0003	0.1	TOE	—
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1,3-propanediol, 2-methyl-2-phenyl-	24765-53-5	0.003	0.0003	0.01	TOE	—
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1-benzyl-3-cyclohexylurea	25855-24-7	0.003	0.0003	0.01	TOE	—
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allyl alcohol, ethoxylated	27274-31-3	0.003	0.0003	0.01	TOE	—
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glycerin 1-monostearate	31566-31-1	0.003	0.0003	0.01	TOE	—
1-butanol, 4-(1-methylethoxy)-	31600-69-8	0.003	0.0003	0.01	TOE	—
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dihydrodicyclopentadienol	133-21-1 ~~42554-02-9~~	0.003	0.0003	0.01	TOE	—

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Substance	CAS#	MCL/MAC or TAC (mg/L)	SPAC (mg/L)	STEL (mg/L)	Source of supporting documentation [1, 2, 3, 4, 5, 6, 7]	Additional information
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2,2-dimethyl-bis(1-methylpropyl)ester butanedioic acid	57983-28-5 ~~57923-28-5~~	0.003	0.0003	0.01	TOE	—
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hydrophobic silica	67762-90-7	0.003	0.0003	0.01	TOE	—
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cyclomethicone	69430-24-6	0.003	0.0003	0.01	TOE	—
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2,6-dichloro-4-(2-methylbutan-2-yl)phenol	75908-77-9	0.003	0.0003	0.01	TOE	—
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N-p-toluyl-N'-cyclohexylurea	89609-46-1	0.003	0.0003	0.01	TOE	—

Table 4.1
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Substance	CAS#	MCL/MAC or TAC (mg/L)	SPAC (mg/L)	STEL (mg/L)	Source of supporting documentation [1, 2, 3, 4, 5, 6, 7]	Additional information
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3-methoxyhex-1-ene	108811-41-2	0.003	0.0003	0.01	TOE	—
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methyl 2-[(ethoxycarbonothioyl)sulfanyl]propanoate	351491-23-1	0.003	0.0003	0.01	TOE	—
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