

Office of the Revisor of Statutes

Administrative Rules



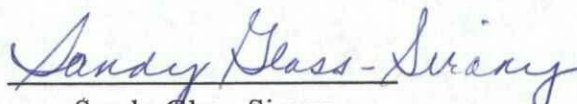
TITLE: Adopted Permanent Rules Relating to Health Risk Limits

AGENCY: Department of Health

MINNESOTA RULES: Chapter 4717



The attached rules are approved for
filing with the Secretary of State


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1.1 **Department of Health**1.2 **Adopted Permanent Rules Relating to Health Risk Limits**1.3 **4717.7860 HEALTH RISK LIMITS TABLE.**

1.4 [For text of subps 1 to 3, see M.R.]

1.5 **Subp. 3a. Acetochlor ESA.**

1.6 CAS number: 187022-11-3

1.7 Year Proposed: 2010

1.8 Volatility: Nonvolatile

	Acute	Short-term	Subchronic	Chronic	Cancer
HRL (µg/L)	ND	600	600	300	NA
RfD (mg/kg-day)	—	0.37	0.23	0.075	—
RSC	—	0.5	0.2	0.2	—
SF (per mg/kg-day)	—	—	—	—	—
ADAF or AF lifetime	—	—	—	—	—
Intake Rate (L/kg-day)	—	0.289	0.077	0.043	—
Endpoints	—	thyroid (E)	thyroid (E)	thyroid (E)	—

1.21 **Subp. 3b. Acetochlor OXA.**

1.22 CAS number: 184992-44-4

1.23 Year Proposed: 2010

1.24 Volatility: Nonvolatile

	Acute	Short-term	Subchronic	Chronic	Cancer
HRL (µg/L)	ND	200	200	100	NA
RfD (mg/kg-day)	—	0.12	0.077	0.026	—

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2.1

RSC	—	0.5	0.2	0.2	—
SF (per mg/kg-day)	—	—	—	—	—
ADAF or AF_{lifetime}	—	—	—	—	—
Intake Rate (L/kg-day)	—	0.289	0.077	0.043	—
Endpoints	—	thyroid (E)	thyroid (E)	thyroid (E)	—

2.9

Subp. 3c. **Acetone.**

2.10

CAS number: 67-64-1

2.11

Year Proposed: 2010

2.12

Volatility: Moderate

2.13

	Acute	Short-term	Subchronic	Chronic	Cancer
HRL (µg/L)	ND	9,000	8,000	4,000	NA
RfD (mg/kg-day)	—	5.0	3.0	0.90	—
RSC	—	0.5	0.2	0.2	—
SF (per mg/kg-day)	—	—	—	—	—
ADAF or AF_{lifetime}	—	—	—	—	—
Intake Rate (L/kg-day)	—	0.289	0.077	0.043	—
Endpoints	—	renal (kidney) system	renal (kidney) system, hematological (blood) system	renal (kidney) system, hematological (blood) system	—

2.28

[For text of subps 4 to 8, see M.R.]

2.29

Subp. 8a. **Dichlorodifluoromethane.**

3.1 CAS number: 75-71-8

3.2 Year Proposed: 2010

3.3 Volatility: High

	Acute	Short-term	Subchronic	Chronic	Cancer
3.4 HRL (µg/L)	ND	ND	ND	700	NA
3.5 RfD	—	—	—	0.15	—
3.6 (mg/kg-day)					
3.7 RSC	—	—	—	0.2	—
3.8 SF (per	—	—	—	—	—
3.9 mg/kg-day)					
3.10 ADAF or	—	—	—	—	—
3.11 AF _{lifetime}					
3.12 Intake Rate	—	—	—	0.043	—
3.13 (L/kg-day)					
3.14 Endpoints	—	—	—	None	—

3.16 Subp. 8b. **1,1-Dichloroethylene.**

3.17 CAS number: 75-35-4

3.18 Year Proposed: 2010

3.19 Volatility: High

	Acute	Short-term	Subchronic	Chronic	Cancer
3.20 HRL (µg/L)	ND	ND	200	200	NA
3.21 RfD	—	—	0.090	0.046	—
3.22 (mg/kg-day)					
3.23 RSC	—	—	0.2	0.2	—
3.24 SF (per	—	—	—	—	—
3.25 mg/kg-day)					
3.26 ADAF or	—	—	—	—	—
3.27 AF _{lifetime}					

4.1	Intake Rate	—	—	0.077	0.043	—
4.2	(L/kg-day)					
4.3	Endpoints	—	—	hepatic (liver)	hepatic (liver)	—
4.4				system	system	

[For text of subps 9 to 12, see M.R.]

Subp. 12a. **Ethylbenzene.**

CAS number: 100-41-4

Year Proposed: 2010

Volatility: High

	Acute	Short-term	Subchronic	Chronic	Cancer
HRL (µg/L)	ND	50	50 (2)	50 (2)	NA
RfD	—	0.075	(2)	(2)	—
(mg/kg-day)					
RSC	—	0.2	(2)	(2)	—
SF (per	—	—	—	—	—
mg/kg-day)					
ADAF or	—	—	—	—	—
AF_{lifetime}					
Intake Rate	—	0.289	(2)	(2)	—
(L/kg-day)					
Endpoints	—	hepatic (liver)	hepatic (liver)	hepatic (liver)	—
		system, renal	system, renal	system, renal	
		(kidney)	(kidney)	(kidney)	
		system	system	system	

Subp. 12b. **Ethylene glycol.**

CAS number: 107-21-1

Year Proposed: 2010

Volatility: Nonvolatile

	Acute	Short-term	Subchronic	Chronic	Cancer
HRL (µg/L)	4,000	4,000	2,000	2,000	NA
RfD (mg/kg-day)	0.76	0.76	0.72	0.50	—
RSC	0.2	0.2	0.2	0.2	—
SF (per mg/kg-day)	—	—	—	—	—
ADAF or AF_{lifetime}	—	—	—	—	—
Intake Rate (L/kg-day)	0.043	0.043	0.077	0.043	—
Endpoints	developmental	developmental	renal (kidney) system, developmental	renal (kidney) system, developmental	—

Subp. 12c. Metolachlor and S-Metolachlor.

CAS number: 51218-45-2; 87392-12-9

Year Proposed: 2010

Volatility: Nonvolatile

	Acute	Short-term	Subchronic	Chronic	Cancer
HRL (µg/L)	400	400	300	300 (3)	NA
RfD (mg/kg-day)	0.24	0.24	0.097	(3)	—
RSC	0.5	0.5	0.2	(3)	—
SF (per mg/kg-day)	—	—	—	—	—
ADAF or AF_{lifetime}	—	—	—	—	—
Intake Rate (L/kg-day)	0.289	0.289	0.077	(3)	—
Endpoints	developmental	developmental	none	none	—

Subp. 12d. Metolachlor ESA.

6.1 CAS number: 171118-09-5

6.2 Year Proposed: 2010

6.3 Volatility: Nonvolatile

	Acute	Short-term	Subchronic	Chronic	Cancer
6.4 HRL (µg/L)	ND	ND	4,000	800	NA
6.5 RfD	—	—	1.7	0.17	—
6.6 (mg/kg-day)					
6.7 RSC	—	—	0.2	0.2	—
6.8 SF (per	—	—	—	—	—
6.9 mg/kg-day)					
6.10 ADAF or	—	—	—	—	—
6.11 AF _{lifetime}					
6.12 Intake Rate	—	—	0.077	0.043	—
6.13 (L/kg-day)					
6.14 Endpoints	—	—	hepatic (liver)	hepatic (liver)	—
6.15 system					
6.16 system					

6.17 Subp. 12e. **Metolachlor OXA.**

6.18 CAS number: 152019-73-3

6.19 Year Proposed: 2010

6.20 Volatility: Nonvolatile

	Acute	Short-term	Subchronic	Chronic	Cancer
6.21 HRL (µg/L)	ND	3,000	3,000 (2)	800	NA
6.22 RfD	—	1.7	(2)	0.17	—
6.23 (mg/kg-day)					
6.24 RSC	—	0.5	(2)	0.2	—
6.25 SF (per	—	—	—	—	—
6.26 mg/kg-day)					
6.27 ADAF or	—	—	—	—	—
6.28 AF _{lifetime}					
6.29					

7.1	Intake Rate	—	0.289	(2)	0.043	—
7.2	(L/kg-day)					
7.3	Endpoints	—	none	none	none	—

[For text of subps 13 and 14, see M.R.]

Subp. 14a. **Perfluorobutane sulfonate (PFBS).**

CAS number: 375-73-5

Year Proposed: 2010

Volatility: Nonvolatile

		Acute	Short-term	Subchronic	Chronic	Cancer
HRL (µg/L)	ND	ND	9	7	NA	
RfD	—	—	0.0042	0.0014	—	
(mg/kg-day)						
RSC	—	—	0.5	0.2	—	
SF (per	—	—	—	—	—	—
mg/kg-day)						
ADAF or	—	—	—	—	—	—
AF						
lifetime						
Intake Rate	—	—	0.245	0.043	—	
(L/kg-day)						
Endpoints	—	—	hepatic (liver) system, hematological (blood) system, renal (kidney) system	hepatic (liver) system, hematological (blood) system, renal (kidney) system	—	

Subp. 14b. **Perfluorobutyrate (PFBA).**

CAS number: 375-22-4

Year Proposed: 2010

Volatility: Nonvolatile

	Acute	Short-term	Subchronic	Chronic	Cancer
HRL (µg/L)	ND	7	7 (2)	7 (2)	NA
RfD (mg/kg-day)	—	0.0038	(2)	(2)	—
RSC	—	0.5	(2)	(2)	—
SF (per mg/kg-day)	—	—	—	—	—
ADAF or AF_{lifetime}	—	—	—	—	—
Intake Rate (L/kg-day)	—	0.289	(2)	(2)	—
Endpoints	—	hepatic (liver) system; thyroid (E)	hepatic (liver) system; thyroid (E)	hepatic (liver) system; thyroid (E)	—

[For text of subps 15 to 18, see M.R.]

Subp. 18a. Toluene.

CAS number: 108-88-3

Year Proposed: 2010

Volatility: High

	Acute	Short-term	Subchronic	Chronic	Cancer
HRL (µg/L)	ND	200	200 (2)	200 (2)	NA
RfD (mg/kg-day)	—	0.22	(2)	(2)	—
RSC	—	0.2	(2)	(2)	—
SF (per mg/kg-day)	—	—	—	—	—
ADAF or AF_{lifetime}	—	—	—	—	—

9.1	Intake Rate	—	0.289	(2)	(2)	—
9.2	(L/kg-day)					
9.3	Endpoints	—	immune system, nervous system	immune system, nervous system	immune system, nervous system	—
9.4						

[For text of subps 19 to 23, see M.R.]

Subp. 23a. **Xylenes.**

CAS number: 1330-20-7

Year Proposed: 2010

Volatility: High

		Acute	Short-term	Subchronic	Chronic	Cancer
9.10	HRL (µg/L)	800	300	300 (2)	300 (2)	NA
9.11	RfD	1.2	0.5	(2)	(2)	—
9.12	(mg/kg-day)					
9.13	RSC	0.2	0.2	(2)	(2)	—
9.14	SF (per	—	—	—	—	—
9.15	mg/kg-day)					
9.16	ADAF or	—	—	—	—	—
9.17	AF					
9.18	lifetime					
9.19	Intake Rate	0.289	0.289	(2)	(2)	—
9.20	(L/kg-day)					
9.21	Endpoints	nervous system	nervous system	renal (kidney) system, nervous system	renal (kidney) system, nervous system	—
9.22						
9.23						
9.24						
9.25						

[For text of subp 24, see M.R.]

REPEALER. Minnesota Rules, part 4717.7500, subparts 3, 3a, 6a, 8, 14, 25, 36, 39a, 40a, 41, 43, 46, 50, 52, 52a, ~~61~~, 65, 68, 70, 77a, 78b, 79, 80a, 81a, 85, 88b, and 89, are repealed.