

## CHEMICALS OF CONCERN: INTERTEK'S CLEAN AIR PROGRAM

### ANSI/BIFMA E3-2019 FURNITURE SUSTAINABILITY STANDARD: 7.6.1 LOW EMITTING FURNITURE

Compound Name	Workstation	Seating	Individual Components	
	Maximum Allowable Concentration (OP or PO)	Maximum Allowable Concentration	Open Plan Max Allowable Emission Factor	Private Office Max Allowable Emission Factor
TVOC toluene	≤ 0.5 mg/m <sup>3</sup>	≤ 0.25 mg/m <sup>3</sup>	345 (µg/m <sup>2</sup> hr)	694 (µg/m <sup>2</sup> hr)
Formaldehyde	≤ 50 ppb	≤ 25 ppb	42.3 (µg/m <sup>2</sup> hr)	85.1 (µg/m <sup>2</sup> hr)
Total Aldehydes	≤ 100 ppb	≤ 50 ppb	2.8 (µmol/m <sup>2</sup> hr)	5.7 (µmol/m <sup>2</sup> hr)
4-Phenylcyclohexene	≤ 0.0065 mg/m <sup>3</sup>	≤ 0.00325 mg/m <sup>3</sup>	4.5 (µg/m <sup>2</sup> hr)	9.0 (µg/m <sup>2</sup> hr)

### ANSI/BIFMA E3-2019 FURNITURE SUSTAINABILITY STANDARD: 7.6.3 LOW EMITTING FURNITURE- ADVANCED

Compound Name	Workstation	Seating	Individual Components	
	Maximum Allowable Concentration (OP or PO)	Maximum Allowable Concentration	Open Plan Max Allowable Emission Factor	Private Office Max Allowable Emission Factor
Formaldehyde	≤ 9 µg/m <sup>3</sup>	≤ 4.5 µg/m <sup>3</sup>	6.2 (µg/m <sup>2</sup> hr)	12.5 (µg/m <sup>2</sup> hr)

**1: Furniture Products** are referenced against the ANSI/BIFMA e3-2019 Furniture Sustainability Standard. Modeling is as defined by ANSI/BIFMA in the standard. Intertek's Clean Air SILVER Certification requires conformance to 7.6.1. Intertek's Clean Air GOLD Certification requires conformance to 7.6.1 and 7.6.2 (+/- 7.6.3). Concentration Limits for 7.6.1 per Table 7.2, 7.3 and 7.4. Concentration Limits for 7.6.2 per Annex C; Concentration Limits for 7.6.3 per Tables 7.5, 7.6, and 7.7

**2: Building Products** are referenced against Table 4-1 in the CDPH 01350 (SM v1.2) standard titled "Target CREL VOCs and their maximum allowable concentrations." Surface Area Based Modeling is used to determine conformance to the Private Office, School Classroom, and Residence modeling scenarios. Building Products are evaluated on a pass/fail basis to this criteria. Intertek's Clean Air GOLD Certification requires conformance to the Private Office scenario and/or the School Classroom scenario. Residence is not currently required for certification.

## ANSI/BIFMA E3-2019 FURNITURE SUSTAINABILITY STANDARD: 7.6.2 INDIVIDUAL VOC CONCENTRATION LIMITS AT 336 HRS

Compound Name	Workstation	Seating	Individual Components	
	Maximum Allowable Concentration ( $\mu\text{g}/\text{m}^3$ )	Maximum Allowable Concentration ( $\mu\text{g}/\text{m}^3$ )	Open Plan Max Allowable Emission Factor ( $\mu\text{g}/\text{m}^2\text{h}$ )	Private Office Max Allowable Emission Factor ( $\mu\text{g}/\text{m}^2\text{h}$ )
Ethylbenzene	1000	500	689	1392
Styrene	450	225	310	627
p-Xylene	350	175	241	487
1,4-Dichlorobenzene	400	200	276	557
Epichlorohydrin	1.5	.75	1.0	2.1
Ethylene Glycol	200	100	138	278
1-Methoxy-2-propanol (Propylene glycol monomethyl ether)	3500	1750	2413	4874
Vinyl Acetate	100	50	68.9	139
m-Xylene	350	175	241	487
Toluene	150	75	103	209
Chlorobenzene	500	250	345	696
Phenol	100	50	68.9	139
2-Methoxyethanol	30	15	21	42
Ethylene glycol monomethyl ether acetate	45	22.5	31	63
n-Hexane	3500	1750	2413	4874
2-Ethoxyethanol	35	17.5	24	49
2-Ethoxyethyl acetate	150	75	103	209
1,4-Dioxane	1500	750	1034	2089
Tetrachlorethylene	17.5	8.75	12.1	24.4
Formaldehyde	16.5	8.25	11	23
Isopropanol	3500	1750	2413	4874
Chloroform	150	75	103	209
N, N-Dimethyl Formamide	40	20	28	56
Benzene	30	15	21	42
1,1,1-Trichloroethane	500	250	345	696
Acetaldehyde	9	4.5	6	13
Methylene Chloride	200	100	138	278
Carbon Disulfide	400	200	276	557
Trichloroethylene	300	150	207	418
1-Methyl-2-Pyrrolidione	160	80	110	223
Naphthalene	4.5	2.25	3	6
o-Xylene	350	175	241	487

## CDPH: TARGET CREL VOS & MAX ALLOWABLE CONCENTRATIONS

Compound Name	CAS No.	Allowable Concentration ( $\mu\text{g}/\text{m}^3$ )
Acetaldehyde	75-07-0	70
Benzene	71-43-2	1.5 <sup>b</sup>
Carbon Disulfide	75-15-0	400
Carbon Tetrachloride	56-23-5	20
Chlorobenzene	108-90-7	500
Chloroform	67-66-3	150
Dichlorobenzene (1,4-)	106-46-7	400
Dichloroethylene (1,1)	75-35-7	35
Dimethylformamide (N, N-)	68-12-2	40
Dioxane (1,4-)	123-91-1	1500
Epichlorohydrin	106-89-8	1.5
Ethylbenzene	100-41-4	1000
Ethylene glycol	107-21-1	200
Ethylene glycol monoethyl ether	110-80-5	35
Ethylene glycol monoethyl ether acetate	111-15-9	150
Ethylene glycol monomethyl ether	109-86-4	30
Ethylene glycol monomethyl ether acetate	110-49-6	45
Formaldehyde	50-00-0	9 <sup>c</sup>
Hexane (n-)	110-54-3	3500
Isophorone	78-59-1	1000
Isopropanol	67-63-0	3500
Methyl chloroform	71-55-6	500
Methylene chloride	75-09-2	200
Methyl t-butyl ether	1634-04-4	4000
Naphthalene	91-20-3	4.5
Phenol	108-95-2	100
Propylene glycol monomethyl ether	107-98-2	3500
Styrene	100-42-5	450
Tetrachloroethylene	127-18-4	17.5
Toluene	108-88-3	150
Trichloroethylene	79-01-6	300
Vinyl acetate	108-05-4	100
Xylenes, technical mixture (m-, o-, p-xylene combined)	108-38-3, 95-47-6, 106-42-3	350