

D3.1. Table 3. Boiling temperatures at different pressures in °C

Substance	Formula	Vapor pressure in mbar										Equation (7)			
		5	10	50	100	250	500	1,000	2,000	5,000	10,000	A	B	C	D
Elements															
xenon	Xe							−108.3	−95.3	−74.2	−54.5	−6.00659	1.37325	−0.77703	−1.22529
Krypton	Kr							−153.6	−144.0	−128.5	−114.0	−5.98396	1.34334	−0.66521	−1.30012
Argon	Ar							−186.0	−178.9	−167.4	−156.6	−5.92801	1.21982	−0.53967	−1.52312
Neon	Ne						−248.2	−246.1	−243.6	−239.5	−235.6	−5.74238	1.08860	−0.05896	−1.19851
Helium	He			−271.0	−270.7	−270.1	−269.6	−268.9	−268.1			−4.06856	1.04379	1.11594	0.08835
Air						−204.8	−200.0	−194.4	−187.8	−177.0	−167.0	−5.35069	−0.21537	0.93623	−3.02641
Hydrogen	H ₂				−258.5	−256.6	−254.9	−252.8	−250.3	−246.0	−241.8	−4.83622	0.94200	0.76650	−0.47071
Nitrogen	N ₂					−206.0	−201.3	−195.9	−189.5	−179.2	−169.4	−6.12498	1.26499	−0.76765	−1.78173
Oxygen	O ₂	−214.6	−211.9	−204.4	−200.5	−194.5	−189.2	−183.1	−175.9	−164.3	−153.5	−6.05148	1.23506	−0.62883	−1.61288
Sulfur	S	211.7	232.1	287.9	316.6	360.3	398.8	443.3	495.5	579.7	657.9	−15.68872	19.60608	−12.56687	1.67046
Fluorine	F ₂	−217.2	−214.7	−207.8	−204.2	−198.7	−193.8	−188.2	−181.7	−171.2	−161.4	−6.27045	1.53939	−1.25605	−1.27235
Chlorine	Cl ₂			−85.8	−76.2	−61.7	−48.9	−34.3	−17.4	9.6	34.5	−6.43911	1.48278	−1.21184	−2.02926
Bromine	Br ₂				2.4	21.9	38.9	58.3	80.8	116.5	149.1	−6.76024	1.50339	−0.64097	−3.62166
Iodine	I ₂					134.5	157.5	183.8	214.3	262.8	307.5	−6.98158	2.33987	−1.48090	−3.73441
Anorganic compounds															
Hydrogen fluoride	HF		−75.2	−48.4	−35.2	−15.7	0.8	19.2	39.7	71.0	98.3	−9.73172	5.07747	−2.98832	5.51671
Hydrogen chloride	HCl					−106.5	−96.6	−85.3	−72.1	−51.2	−32.1	−6.63222	1.06066	0.05415	−4.45907
Hydrogen bromide	HBr						−79.4	−66.8	−52.4	−29.6	−8.7	−5.92115	0.77533	−1.67956	1.00212
Hydrogen iodide	HI						−50.5	−35.7	−18.6	8.8	34.0	−5.92123	0.95693	−1.04474	−1.03336
Hydrogen cyanide	HCN					−7.4	8.0	25.3	45.1	75.7	103.0	−9.77338	5.29679	−4.36059	1.58018
Water	H ₂ O		7.0	32.9	45.8	65.0	81.3	99.6	120.2	151.8	179.9	−7.86975	1.90561	−2.30891	−2.06472
Hydrogen sulfide	H ₂ S					−84.4	−73.3	−60.6	−45.9	−22.5	−1.1	−6.50342	1.52011	−1.36969	−1.96704
Ammonia	NH ₃				−71.2	−58.0	−46.5	−33.6	−18.8	4.1	24.9	−7.30274	1.64638	−2.01606	−1.96884
Nitric oxide	NO						−157.6	−151.9	−145.4	−135.3	−126.2	−8.38772	0.85755	−3.11447	−8.98765
Nitrogen dioxide	NO ₂					−6.2	6.8	20.9	36.4	59.3	78.7	−11.33898	2.37620	0.67820	−2.53997
Nitrous oxide	N ₂ O							−88.7	−76.2	−56.4	−38.2	−6.79599	1.59751	−1.85163	−2.29494
Dinitrogen tetroxide	N ₂ O ₄					−6.1	6.8	21.0	36.6	59.6	79.1	−11.71738	3.10196	0.59704	−5.33648
Cyanogen	C ₂ N ₂							−21.4	−5.1	20.7	44.3	−7.51492	1.94916	−2.36750	−4.23472
Phosphorus trichloride	PCl ₃	−35.6	−25.9	0.7	14.4	35.2	53.5	74.6	99.2	138.4	174.6	−8.83133	5.61883	−4.80318	−1.25347
Cyanogen chloride	ClCN						−3.9	12.5	30.9	59.3	84.9	−7.49333	1.78753	−4.04253	8.50574
Silane	SiH ₄	−167.8	−163.1	−150.2	−143.4	−132.8	−123.3	−112.3	−99.2	−78.2	−58.9	−7.30552	2.71060	−0.09783	−4.71464
Tetrachlorosilane	SiCl ₄	−47.9	−38.7	−13.3	−0.3	19.5	36.8	56.8	79.9	116.8	151.0	−6.60174	0.34409	−1.09066	−3.15050

Carbon monoxide	CO					−202.1	−197.2	−191.6	−185.0	−174.3	−164.2	−6.19574	1.32502	−0.95226	−1.98513
Carbon dioxide	CO ₂										−40.1	−7.02916	1.53937	−2.28330	−2.34853
Carbon suboxide	C ₃ O ₂	−82.8	−74.8	−53.1	−41.9	−25.1	−10.5	6.0	24.9	53.8	78.8	−13.34201	11.51312	−6.91741	−0.29406
Carbonyl sulfide	COS	−123.0	−116.6	−99.1	−90.1	−76.4	−64.3	−50.5	−34.3	−8.6	15.3	−6.51272	1.55373	−1.33074	−2.08761
Phosgene	CCl ₂ O	−80.1	−72.4	−51.3	−40.4	−23.9	−9.3	7.4	26.7	57.5	85.7	−6.82435	0.89402	−0.50281	−4.67598
Carbon disulfide	CS ₂	−57.9	−48.8	−23.8	−10.9	8.7	26.0	45.8	68.8	105.2	138.5	−6.58802	1.03676	0.15875	−3.44094
Sulfur dioxide	SO ₂			−61.9	−52.1	−37.5	−24.8	−10.3	6.3	32.5	56.3	−7.27858	1.72871	−2.37473	−2.70464
Sulfur trioxide	SO ₃					19.6	31.1	44.2	59.5	84.1	107.3	−8.74717	6.32513	−13.93665	−9.67972
Sulfuryl chloride	Cl ₂ SO ₂	−36.5	−27.0	−1.3	11.9	31.7	49.1	69.0	92.1	129.2	163.9	−6.32835	0.89929	−2.88437	−1.24330
Sulfur hexafluoride	SF ₆									−29.8	−8.0	−7.08034	1.65103	−1.96365	−0.25060
Organic compounds containing sulfur															
Methyl mercaptan	CH ₄ S	−81.6	−73.8	−52.6	−41.8	−25.3	−10.9	5.7	24.9	55.7	84.3	−8.04229	4.64898	−4.38751	−1.03684
Ethyl mercaptan	C ₂ H ₆ S	−62.2	−53.6	−30.1	−18.0	0.3	16.3	34.7	55.9	89.7	120.8	−6.85400	1.41434	−1.74027	−2.40242
Dimethyl sulfide	C ₂ H ₆ S	−59.7	−51.2	−27.9	−15.9	2.4	18.5	37.0	58.5	92.9	124.6	−7.20168	1.99080	−1.67979	−3.99499
Diethyl sulfide	C ₄ H ₁₀ S	−23.6	−13.1	15.4	29.8	51.5	70.3	91.7	116.3	155.0	190.5	−6.90446	0.48320	−1.77018	−0.12336
Thiophene	C ₄ H ₄ S	−26.0	−16.3	10.2	23.8	44.6	62.8	83.8	108.1	147.0	182.8	−7.01021	1.63774	−1.66720	−4.21813
Halogenated hydrocarbons															
Fluoromethane (R41)	CH ₃ F	−140.5	−135.0	−120.0	−112.2	−100.5	−90.3	−78.6	−65.1	−43.7	−24.0	−7.21927	1.95643	−1.73271	−2.07627
Difluoromethane (R32)	CH ₂ F ₂	−119.6	−113.5	−96.9	−88.5	−75.7	−64.6	−51.9	−37.3	−14.3	6.6	−7.47027	1.75595	−2.01429	−2.62147
Trifluoromethane (R23)	CHF ₃	−141.6	−136.3	−121.8	−114.4	−103.2	−93.4	−82.3	−69.4	−49.1	−30.3	−7.38216	1.96234	−2.68392	−1.43178
Tetrafluoromethane (R14)	CF ₄	−175.8	−171.6	−160.3	−154.4	−145.4	−137.4	−128.3	−117.6	−100.4	−84.6	−6.92188	1.54525	−1.41276	−2.87791
Methyl chloride	CH ₃ Cl		−96.2	−77.1	−67.3	−52.5	−39.4	−24.5	−7.1	20.4	45.7	−6.71862	1.27727	−0.96338	−3.14698
Methylene chloride	CH ₂ Cl ₂	−56.3	−47.8	−24.5	−12.6	5.5	21.3	39.4	60.5	94.2	125.5	−7.57368	3.17104	−3.53296	−2.27696
Chloroform	CHCl ₃	−41.8	−32.9	−8.2	4.5	23.9	41.0	60.7	83.6	120.0	153.4	−7.32485	1.69599	−0.93627	−5.89590
Carbon tetrachloride	CCl ₄			2.1	15.8	36.7	55.1	76.3	101.0	140.5	177.1	−7.11728	1.96174	−2.05900	−3.26771
Bromomethane	CH ₃ Br	−84.4	−76.6	−55.3	−44.4	−27.8	−13.3	3.3	22.4	52.7	80.2	−7.65380	2.84555	−1.71564	−2.54232
Dibromomethane	CH ₂ Br ₂	−16.0	−6.0	21.3	35.4	56.6	75.2	96.5	121.2	160.3	196.1	−7.25658	1.92921	−1.61527	−4.04404
Tribromomethane	CHBr ₃	18.8	30.4	62.0	78.2	102.7	124.1	148.7	177.2	223.0	265.7	−7.16326	2.92794	−3.91279	−1.16341
Tetrabromomethane	CBr ₄			95.2	111.8	137.8	161.3	188.8	220.6	269.5	310.6	−13.48480	9.03531	1.84773	−22.26830
Chlorodifluoromethane (R22)	CHClF ₂	−113.5	−107.0	−89.5	−80.4	−66.8	−54.8	−41.1	−25.2	0.1	23.4	−7.09210	1.61905	−2.01221	−2.73123
Dichlorofluoromethane (R21)	CHCl ₂ F	−78.7	−70.9	−49.8	−39.0	−22.5	−8.1	8.5	27.7	58.3	86.7	−6.95944	1.53177	−1.97969	−3.25683
Chlorotrifluoromethane (R13)	CClF ₃	−144.2	−138.7	−123.7	−115.9	−104.1	−93.7	−81.7	−67.7	−45.2	−24.4	−6.82801	1.52677	−1.75147	−2.23841
Dichlorodifluoromethane (R12)	CCl ₂ F ₂	−108.7	−101.8	−82.9	−73.1	−58.3	−45.2	−30.1	−12.5	15.7	41.7	−6.92085	1.62615	−1.73939	−2.58282
Trichlorofluoromethane (R11)	CCl ₃ F	−71.6	−63.3	−40.4	−28.6	−10.7	5.1	23.3	44.4	78.2	109.4	−6.91946	1.52457	−1.66128	−2.85320
Ethyl fluoride (R161)	C ₂ H ₅ F	−113.2	−106.5	−88.2	−78.8	−64.6	−52.1	−38.0	−21.6	4.4	28.1	−7.07032	1.42577	−1.49199	−1.92623
Ethyl chloride	C ₂ H ₅ Cl	−78.2	−70.2	−48.3	−37.1	−20.1	−5.2	11.9	31.7	63.4	92.7	−7.36967	2.69543	−3.02790	−1.39375
Ethyl bromide	C ₂ H ₅ Br	−62.1	−53.0	−28.2	−15.7	3.1	19.5	38.1	59.5	93.7	125.1	−9.71666	7.74488	−7.76676	3.99427

D3.1. Table 3. (continued)

Substance	Formula	Vapor pressure in mbar										Equation (7)			
		5	10	50	100	250	500	1,000	2,000	5,000	10,000	A	B	C	D
1,1-Dichloroethane	C ₂ H ₄ C ₂ H ₄ Cl ₂	−45.7	−36.5	−11.5	1.3	20.6	37.4	56.7	78.9	114.0	146.3	−6.63204	0.36053	−1.04822	−2.87286
1,2-Dichloroethane	C ₂ H ₄ Cl ₂	−26.2	−16.4	10.2	23.8	44.4	62.5	83.2	107.2	145.1	179.8	−8.26850	3.49184	−3.19752	−2.97053
1,2-Dibromoethane	C ₂ H ₄ Br ₂		17.5	47.9	63.4	86.8	107.4	131.0	158.4	202.3	243.1	−7.96068	4.07852	−4.74206	−0.88410
1,1,1-Trifluoroethane (R143a)	C ₂ H ₃ F ₃			−95.2	−86.4	−72.9	−61.1	−47.5	−31.8	−6.7	16.3	−7.35995	1.71203	−2.01879	−2.98413
1,1,1-Trichloroethane	C ₂ H ₃ Cl ₃		−25.9	0.4	14.0	34.6	52.8	73.7	98.0	136.9	172.8	−7.21356	1.90482	−2.08892	−3.31006
1,1,2,2-Tetrachloroethane	C ₂ H ₂ Cl ₄	18.0	29.5	60.9	76.9	100.9	121.7	145.4	172.7	215.9	256.0	−5.60385	−1.82148	−0.70234	−1.88475
Pentachloroethane	C ₂ HCl ₅	27.3	39.2	71.5	88.1	113.1	134.9	159.9	188.7	234.6	276.7	−7.59524	1.63691	−2.82337	−2.34305
Hexachloroethane	C ₂ Cl ₆								215.1	265.9	313.7	−6.84574	1.14406	−2.27578	−7.15228
1,1,2,2-Tetrachlorodifluoroethane	C ₂ Cl ₄ F ₂				31.2	52.5	71.1	92.6	117.5	157.4	194.5	−7.71309	2.64672	−3.98878	−1.66517
1,1,2-Trichlorotrifluoroethane	C ₂ Cl ₃ F ₃			−20.7	−8.1	11.0	27.8	47.2	69.8	105.9	139.3	−7.24399	1.63003	−2.12928	−3.49922
1,2-Dichlorotetrafluoroethane	C ₂ Cl ₂ F ₄	−84.9	−77.0	−55.6	−44.7	−28.1	−13.5	3.3	22.8	54.1	83.3	−7.64719	2.95529	−4.23671	0.15959
1-Chloropropane	C ₃ H ₇ Cl	−53.5	−44.7	−20.6	−8.2	10.7	27.2	46.1	68.2	103.3	135.7	−7.23105	1.89946	−2.29641	−2.86891
1-Chlorobutane	C ₄ H ₉ Cl	−30.6	−21.1	4.9	18.4	39.0	57.2	78.3	102.8	142.2	178.8	−6.77199	0.79529	−1.25773	−5.53709
1-Chloropentane	C ₅ H ₁₁ Cl	−11.5	−1.0	27.7	42.5	65.1	85.0	108.0	134.8	177.6	216.6	−9.45097	5.86945	−5.57003	−2.09598
Chlorotrifluoroethene	C ₂ ClF ₃	−117.7	−108.5	−85.3	−74.1	−57.9	−44.3	−29.1	−11.8	15.5	40.7	−8.22217	4.87114	−7.47925	13.31070
Vinyl chloride	C ₂ H ₃ Cl	−96.2	−89.0	−69.2	−59.0	−43.5	−29.9	−14.1	4.3	33.8	61.3	−6.32153	1.11198	−1.35813	−3.25332
1,1-Dichloroethene	C ₂ H ₂ Cl ₂	−63.4	−55.1	−32.4	−20.7	−2.8	13.0	31.3	52.8	87.5	119.4	−10.49400	9.03819	−7.79814	−1.10724
Trichloroethene	C ₂ HCl ₃	−26.8	−16.6	11.2	25.3	46.4	64.8	85.7	109.9	148.4	184.2	−6.86463	1.75400	−3.57287	0.95588
Tetrachloroethene	C ₂ Cl ₄	−2.1	8.9	39.0	54.3	77.4	97.6	120.6	147.1	189.5	228.8	−6.50488	0.75823	−2.53992	−0.58809
Fluorobenzene	C ₆ H ₅ F	−26.8	−16.8	10.5	24.4	45.4	63.8	84.8	109.1	147.8	183.5	−7.42663	2.30457	−3.23481	−1.05236
Chlorobenzene	C ₆ H ₅ Cl	5.6	16.8	47.5	63.2	86.9	107.7	131.4	159.0	202.8	243.2	−7.41321	2.18452	−2.95675	−1.66197
Bromobenzene	C ₆ H ₅ Br	22.9	34.6	66.7	83.2	108.2	130.2	155.5	184.9	232.0	275.6	−8.10313	3.78791	−4.14347	−2.11742
Iodobenzene	C ₆ H ₅ I	45.4	58.1	92.8	110.5	137.4	160.8	187.8	219.0	268.9	315.1	−7.47909	2.53825	−3.54320	−1.50458
<i>m</i> -Chlorotoluene	C ₇ H ₇ Cl	24.5	37.3	71.6	88.8	114.6	137.0	162.3	191.3	237.3	279.7	−7.90360	2.90903	−4.76707	3.62554
Benzyl chloride	C ₇ H ₇ Cl	42.9	55.4	89.2	106.2	131.8	153.9	179.0	207.9	253.8	296.4	−6.24204	−0.59859	−2.50951	0.21300
<i>n</i>-Alkanes															
Methane	CH ₄					−176.1	−169.4	−161.6	−152.5	−137.8	−124.0	−6.02388	1.26813	−0.56948	−1.37648
Ethane	C ₂ H ₆	−150.6	−145.2	−130.4	−122.7	−111.0	−100.7	−88.8	−75.0	−52.7	−32.1	−6.46252	1.35760	−1.04922	−2.03789
Propane	C ₃ H ₈	−118.1	−111.5	−93.3	−83.9	−69.6	−57.0	−42.4	−25.5	1.7	26.9	−6.71480	1.38388	−1.30695	−2.56827
<i>n</i> -Butane	C ₄ H ₁₀	−89.0	−81.3	−60.0	−49.1	−32.4	−17.7	−0.8	18.8	50.3	79.5	−7.08562	1.79335	−2.00003	−2.31975
<i>n</i> -Pentane	C ₅ H ₁₂	−62.8	−54.1	−30.4	−18.1	0.5	16.9	35.7	57.6	92.6	124.9	−7.36401	1.94358	−2.47191	−2.34757
<i>n</i> -Hexane	C ₆ H ₁₄	−38.9	−29.5	−3.6	9.8	30.0	47.8	68.3	92.1	130.1	165.1	−7.61075	2.00527	−2.74158	−2.82824

<i>n</i> -Heptane	C ₇ H ₁₆	−16.7	−6.6	21.1	35.4	57.0	76.1	98.0	123.4	163.9	201.1	−7.75469	1.84795	−2.80333	−3.62418
<i>n</i> -Octane	C ₈ H ₁₈	3.9	14.6	43.9	59.0	81.9	102.0	125.2	152.0	194.8	234.1	−8.01133	1.98859	−3.26507	−3.99439
<i>n</i> -Nonane	C ₉ H ₂₀	22.7	34.0	64.9	80.7	104.8	126.0	150.3	178.5	223.3	264.4	−8.45145	2.57850	−4.17533	−3.66755
<i>n</i> -Decane	C ₁₀ H ₂₂	40.4	52.2	84.5	101.1	126.3	148.3	173.6	202.9	249.5	292.0	−8.62717	2.55890	−4.50221	−3.63420
<i>n</i> -Undecane	C ₁₁ H ₂₄	57.3	69.6	103.1	120.3	146.3	169.2	195.3	225.7	273.8	317.7	−8.73044	2.35716	−4.52576	−4.46648
<i>n</i> -Dodecane	C ₁₂ H ₂₆	73.2	85.9	120.4	138.2	165.1	188.7	215.7	247.1	296.6	341.4	−8.97902	2.40530	−4.55315	−5.99492
<i>n</i> -Tridecane	C ₁₃ H ₂₈	88.4	101.4	136.9	155.2	182.9	207.1	234.9	266.9	317.3	363.0	−8.71245	1.11086	−3.15308	−8.81599
<i>n</i> -Tetradecane	C ₁₄ H ₃₀	102.1	115.6	152.4	171.2	199.6	224.5	252.9	285.8	338.0	385.4	−8.99672	1.98553	−5.38986	−4.09226
<i>n</i> -Pentadecane	C ₁₅ H ₃₂	115.8	129.5	167.1	186.3	215.4	240.9	270.0	303.5	356.4	404.4	−8.86498	0.89612	−3.70098	−8.72916
<i>n</i> -Hexadecane	C ₁₆ H ₃₄	128.5	142.6	181.0	200.7	230.5	256.5	286.1	320.4	374.3	423.4	−8.96067	0.85195	−4.04080	−8.42218
<i>n</i> -Heptadecane	C ₁₇ H ₃₆	141.2	155.7	195.1	215.2	245.4	271.7	301.8	336.4	390.9	440.2	−9.43782	1.65057	−5.70751	−4.71679
<i>n</i> -Octadecane	C ₁₈ H ₃₈	152.6	167.3	207.3	227.7	258.4	285.1	315.6	350.8	406.1	455.6	−9.87775	2.42883	−7.03772	−3.36978
<i>n</i> -Nonadecane	C ₁₉ H ₄₀	163.9	178.8	219.3	240.0	271.2	298.5	329.5	365.1	420.8	470.3	−9.91003	1.64273	−5.20678	−10.43208
<i>n</i> -Eicosane	C ₂₀ H ₄₂	174.7	189.8	231.1	252.2	284.0	311.7	343.1	379.0	435.2	486.5	−8.99815	−1.30230	−1.45511	−16.74038
Isoalkanes															
Isobutane	C ₄ H ₁₀	−97.2	−89.8	−69.4	−58.8	−42.7	−28.5	−12.1	7.0	37.7	66.2	−6.90675	1.57740	−1.80160	−2.42893
2-Methyl butane	C ₅ H ₁₂	−69.3	−60.9	−37.6	−25.6	−7.3	8.9	27.5	49.1	83.7	115.8	−7.18224	1.72845	−2.05353	−2.71274
2,2-Dimethyl propane	C ₅ H ₁₂						−8.6	9.1	29.9	63.3	94.4	−6.98355	1.67850	−2.08470	−2.42800
2-Methyl pentane	C ₆ H ₁₄	−45.6	−36.3	−10.9	2.2	22.1	39.6	59.8	83.3	120.8	155.5	−7.49311	1.93828	−2.57247	−2.85203
3-Methyl pentane	C ₆ H ₁₄	−43.8	−34.4	−8.7	4.6	24.7	42.4	62.8	86.6	124.7	160.0	−7.76049	2.81104	−3.61863	−1.53175
2,2-Dimethyl butane	C ₆ H ₁₄	−54.7	−45.7	−20.7	−7.8	11.9	29.3	49.3	72.7	110.0	144.4	−6.84403	0.74239	−0.92872	−4.01577
2,3-Dimethyl butane	C ₆ H ₁₄	−48.7	−39.3	−13.7	−0.5	19.6	37.2	57.5	81.1	118.8	153.8	−7.23412	1.74312	−2.49507	−1.81829
Olefins															
Ethylene	C ₂ H ₄	−160.5	−155.5	−142.0	−135.0	−124.3	−114.9	−104.0	−91.3	−70.9	−51.8	−6.41327	1.45469	−1.24183	−1.99446
Propylene	C ₃ H ₆	−121.5	−115.1	−97.4	−88.3	−74.4	−62.1	−48.0	−31.5	−5.2	19.2	−6.66599	1.43430	−1.39324	−2.46883
1-Butene	C ₄ H ₈	−92.5	−84.9	−64.3	−53.7	−37.4	−23.1	−6.7	12.6	43.3	71.8	−7.07897	1.87819	−2.02256	−2.64845
1-Pentene	C ₅ H ₁₀	−67.1	−58.7	−35.4	−23.4	−5.1	11.0	29.6	51.2	85.6	117.4	−7.23957	1.68881	−1.87158	−3.19856
1-Hexene	C ₆ H ₁₂	−42.7	−33.4	−8.0	5.2	25.2	42.8	63.1	86.7	124.4	159.2	−7.47396	1.85450	−2.38903	−3.50639
1-Heptene	C ₇ H ₁₄	−20.6	−10.6	16.9	31.0	52.5	71.4	93.2	118.7	159.2	196.4	−8.62839	3.98397	−4.58652	−2.45443
1-Octene	C ₈ H ₁₆	0.0	10.6	39.8	54.8	77.7	97.8	120.8	147.5	189.7	228.1	−7.93750	1.47392	−1.85509	−5.72867
Propadiene	C ₃ H ₄	−109.8	−103.4	−85.8	−76.6	−62.4	−49.6	−34.7	−17.1	11.8	38.9	−8.00232	4.45942	−2.87994	−5.85178
1,2-Butadiene	C ₄ H ₆	−80.9	−72.7	−50.4	−38.9	−21.7	−6.7	10.5	30.4	62.1	91.5	−6.07102	0.12159	−1.55692	−0.53215
1,3-Butadiene	C ₄ H ₆	−90.8	−83.3	−62.6	−52.0	−35.7	−21.4	−4.8	14.4	45.1	73.5	−6.79824	1.08553	−0.96279	−3.84778
1,2-Pentadiene	C ₅ H ₈	−55.0	−46.2	−22.1	−9.7	9.0	25.5	44.4	66.6	102.3	136.1	−5.94252	0.26690	−2.35857	−1.73048
<i>trans</i> -1,3-Pentadiene	C ₅ H ₈	−57.9	−49.1	−25.0	−12.6	6.2	22.6	41.6	63.8	99.7	133.9	−5.50529	−0.22313	−2.15448	−1.34395
1,4-Pentadiene	C ₅ H ₈	−69.3	−60.9	−38.0	−26.2	−8.3	7.4	25.6	46.9	81.5	114.7	−5.36609	−0.09618	−2.39750	−1.13323
2,3-Pentadiene	C ₅ H ₈	−51.8	−43.0	−18.7	−6.3	12.5	29.0	47.9	69.9	105.2	138.2	−6.57492	0.82240	−2.46643	−2.03177

D3.1. Table 3. (continued)

Substance	Formula	Vapor pressure in mbar										Equation (7)			
		5	10	50	100	250	500	1,000	2,000	5,000	10,000	A	B	C	D
Acetylene and derivatives															
Acetylene	C ₂ H ₂								−72.1	−51.7	−32.9	−6.99241	1.57338	−1.33202	−5.21884
Propyne	C ₃ H ₄	−100.9	−93.9	−75.0	−65.3	−50.7	−38.0	−23.4	−6.6	20.2	44.8	−7.11026	1.86493	−2.56109	−1.65671
2-Butyne	C ₄ H ₆				−23.9	−6.3	9.1	26.6	46.9	79.1	108.6	−6.85375	0.83418	−1.42544	−2.91847
1-Butyne	C ₄ H ₆	−79.1	−71.3	−50.2	−39.4	−23.0	−8.7	7.8	26.8	57.1	85.0	−7.17126	1.56844	−2.22263	−2.83839
Naphthenes															
Cyclopropane	C ₃ H ₆	−111.2	−104.3	−85.4	−75.7	−61.0	−48.1	−33.1	−15.7	12.6	39.0	−8.18446	5.40338	−5.26106	0.29975
Cyclobutane	C ₄ H ₈	−80.0	−71.9	−49.6	−38.1	−20.7	−5.4	12.2	32.6	65.0	94.8	−7.11287	1.86338	−1.59855	−2.35844
Cyclopentane	C ₅ H ₁₀	−53.7	−44.7	−19.9	−7.1	12.3	29.3	48.8	71.5	107.8	141.3	−7.00184	1.67430	−1.95254	−2.43833
Methyl cyclopentane	C ₆ H ₁₂	−37.7	−28.1	−1.8	11.8	32.4	50.5	71.4	95.7	134.5	170.5	−7.22687	1.83847	−2.26044	−2.89788
Ethyl cyclopentane	C ₇ H ₁₄	−15.1	−4.7	23.7	38.4	60.7	80.3	102.9	129.2	171.2	209.9	−7.33383	1.58750	−2.00285	−3.84956
Propyl cyclopentane	C ₈ H ₁₆	5.5	16.5	46.6	62.1	85.8	106.6	130.5	158.3	202.5	243.0	−7.56400	1.41441	−1.85483	−4.86488
Butyl cyclopentane	C ₉ H ₁₈	24.6	36.3	68.2	84.5	109.2	130.9	155.9	185.0	231.7	274.9	−8.82045	4.56618	−6.39502	0.04910
Pentyl cyclopentane	C ₁₀ H ₂₀	42.1	54.5	87.9	105.0	130.9	153.6	179.9	210.8	261.3	309.1	−8.34838	4.60920	−8.05957	2.47945
Hexyl cyclopentane	C ₁₁ H ₂₂	60.4	72.9	107.3	125.0	151.9	175.5	202.6	233.9	283.6	328.9	−8.25942	1.53284	−2.79124	−6.47404
Cyclohexane	C ₆ H ₁₂				19.2	40.3	58.9	80.3	105.2	145.1	182.0	−7.00979	1.57475	−1.96820	−3.26095
Methyl cyclohexane	C ₇ H ₁₄	−17.9	−7.7	20.7	35.4	57.8	77.6	100.5	127.1	169.6	208.9	−6.99290	1.02989	−1.06613	−4.84894
Ethyl cyclohexane	C ₈ H ₁₆	4.7	15.7	46.2	61.9	85.9	107.0	131.4	159.8	205.4	247.9	−6.62098	0.32843	−1.34736	−4.41951
Propyl cyclohexane	C ₉ H ₁₈	23.2	34.9	67.0	83.5	108.6	130.7	156.2	186.0	233.9	279.1	−6.58910	0.42832	−2.35856	−3.12499
Butyl cyclohexane	C ₁₀ H ₂₀	41.8	54.0	87.5	104.7	130.9	153.9	180.4	211.5	261.7	309.3	−6.34269	−0.12784	−2.48780	−3.28017
Pentyl cyclohexane	C ₁₁ H ₂₂	58.7	71.5	106.5	124.4	151.6	175.5	203.1	235.4	287.2	334.7	−9.46392	5.58832	−7.94937	0.81254
Hexyl cyclohexane	C ₁₂ H ₂₄	75.6	88.9	125.0	143.4	171.3	195.9	224.1	257.0	309.7	357.8	−9.74155	5.86346	−8.50766	1.30484
Cyclopentene	C ₅ H ₈	−57.1	−48.1	−23.7	−11.1	8.0	24.7	43.9	66.2	101.7	134.5	−7.05071	1.79116	−2.02594	−2.17803
Cyclohexene	C ₆ H ₁₀	−29.4	−19.6	7.4	21.3	42.5	61.1	82.5	107.5	147.3	184.3	−7.19079	1.97175	−2.26256	−3.04106
Aromatic compounds															
Benzene	C ₆ H ₆			6.3	20.0	40.6	58.8	79.7	103.9	142.6	178.4	−7.11451	1.83981	−2.25158	−3.15179
Toluene	C ₇ H ₈	−9.0	1.5	30.4	45.3	67.8	87.5	110.2	136.4	178.3	216.8	−7.50051	2.08939	−2.56368	−2.85042
Ethyl benzene	C ₈ H ₁₀	9.6	20.8	51.3	67.0	90.8	111.7	135.7	163.5	207.7	248.4	−7.64476	2.01616	−2.69311	−3.25571
Propyl benzene	C ₉ H ₁₂	26.2	38.0	70.1	86.6	111.6	133.5	158.7	187.9	234.3	276.9	−7.90921	2.25623	−3.18277	−3.03789
Butyl benzene	C ₁₀ H ₁₄	44.8	57.0	90.4	107.5	133.6	156.5	182.8	213.2	261.3	305.3	−7.91469	1.51273	−2.16430	−5.64758
Pentyl benzene	C ₁₁ H ₁₆	61.6	74.3	108.9	126.7	153.7	177.5	205.0	237.1	288.3	334.8	−9.80886	6.07290	−7.50612	−1.56859
Hexyl benzene	C ₁₂ H ₁₈	77.4	90.5	126.4	144.8	172.7	197.3	225.6	258.5	311.0	358.4	−9.64511	5.19130	−6.86455	−2.47938
<i>o</i> -Xylene	C ₈ H ₁₀	15.6	27.0	58.1	74.1	98.4	119.6	143.9	172.1	216.8	257.9	−7.60791	1.79921	−2.42215	−3.36892
<i>m</i> -Xylene	C ₈ H ₁₀	12.1	23.3	54.0	69.8	93.7	114.6	138.6	166.4	210.5	250.9	−7.63902	1.65289	−2.19801	−3.94677

<i>p</i> -Xylene	C ₈ H ₁₀		22.2	53.0	68.8	92.8	113.8	137.9	165.8	210.0	250.6	−7.67395	1.81953	−2.39673	−3.44627
1,2,3-Trimethyl benzene	C ₉ H ₁₂	38.5	50.8	84.4	101.5	127.4	149.9	175.7	205.3	252.0	294.7	−7.62987	1.23706	−2.24536	−2.65979
1,2,4-Trimethyl benzene	C ₉ H ₁₂	34.2	46.2	79.0	95.8	121.2	143.5	168.9	198.3	244.8	287.2	−8.03805	2.10078	−2.99671	−3.00299
1,3,5-Trimethyl benzene	C ₉ H ₁₂	31.3	43.2	75.7	92.3	117.3	139.2	164.2	193.0	238.4	279.7	−7.82434	1.27065	−2.17890	−3.60299
1,2,3,4-Tetramethyl benzene	C ₁₀ H ₁₄	61.0	73.9	108.8	126.7	153.7	177.4	204.6	236.2	286.5	332.6	−9.61420	5.81425	−7.22553	−0.17754
1,2,3,5-Tetramethyl benzene	C ₁₀ H ₁₄	56.4	69.1	103.5	121.1	147.7	170.9	197.6	228.3	277.2	321.9	−8.71211	3.45458	−5.00258	−1.61174
1,2,4,5-Tetramethyl benzene	C ₁₀ H ₁₄			102.2	119.9	146.5	169.7	196.2	226.8	275.0	319.1	−7.76585	0.96770	−2.26413	−3.93132
Pentamethyl benzene	C ₁₁ H ₁₆	80.3	93.9	131.0	149.8	178.2	202.9	230.9	263.1	313.7	359.8	−8.00728	1.10336	−2.69076	−2.48217
Hexamethyl benzene	C ₁₂ H ₁₈				179.3	208.4	233.8	262.9	296.5	349.7	398.5	−8.54789	2.39022	−4.64673	−4.09546
Styrene	C ₈ H ₈	17.1	28.4	59.4	75.2	99.4	120.5	144.9	173.3	218.7	260.6	−8.15126	3.51813	−4.34082	−2.42333
Isopropyl benzene	C ₉ H ₁₂	21.7	33.2	64.6	80.8	105.5	127.1	151.9	180.7	226.6	268.8	−7.53496	1.50829	−2.32928	−4.31012
Biphenyl	C ₁₂ H ₁₀	97.0	111.1	149.7	169.4	199.2	225.1	254.7	288.9	342.9	392.4	−7.75945	1.70606	−2.96632	−3.06189
Diphenyl methane	C ₁₃ H ₁₂	105.4	119.5	158.1	177.9	207.8	234.0	264.0	298.6	353.1	402.4	−8.53233	2.00873	−2.93179	−6.03029
Triphenyl methane	C ₁₉ H ₁₆	178.3	194.6	238.8	261.3	295.3	324.9	358.8	397.9	459.9	516.6	−8.84156	2.41421	−5.56532	−2.75668
Tetraphenyl methane	C ₂₅ H ₂₀			330.3	356.3	395.6	429.8	468.9	514.0	585.3	649.7	−9.59635	3.13229	−6.82319	−2.76211
Naphthalene	C ₁₀ H ₈		80.6	117.1	135.8	164.1	188.9	217.4	250.4	303.0	351.4	−7.97682	2.86601	−3.50249	−2.67778
1-Methylnaphthalene	C ₁₁ H ₁₀	86.8	100.9	139.4	159.0	188.7	214.5	243.9	277.8	331.2	380.1	−6.84372	−0.39471	−0.79459	−3.92723
2-Methylnaphthalene	C ₁₁ H ₁₀	85.6	99.2	136.6	155.8	185.1	211.0	241.0	276.1	332.4	383.7	−10.50759	8.20742	−8.41116	−1.58015
1-Ethylnaphthalene	C ₁₂ H ₁₂	99.8	113.9	152.3	171.9	201.6	227.7	257.6	292.3	347.6	398.3	−9.12884	4.70431	−6.05976	−1.87388
2-Ethylnaphthalene	C ₁₂ H ₁₂	96.8	111.0	150.0	170.1	200.5	227.2	257.8	293.0	348.3	398.1	−8.42943	2.12066	−1.95832	−6.02831
Alcohols															
Methanol	CH ₄ O	−29.3	−20.4	3.4	15.2	32.7	47.5	64.1	82.8	111.4	136.6	−8.72963	1.45860	−2.78449	−0.70669
Ethanol	C ₂ H ₆ O	−15.7	−6.7	17.2	29.0	46.5	61.4	77.9	96.6	125.2	150.7	−8.33803	0.08720	−3.30575	−0.26001
1-Propanol	C ₃ H ₈ O	0.7	9.9	34.3	46.4	64.3	79.6	96.8	116.3	146.8	174.5	−8.60671	2.17353	−8.04678	3.69194
1-Butanol	C ₄ H ₁₀ O	16.8	26.3	51.5	64.1	82.9	99.1	117.4	138.3	171.4	201.9	−8.33120	2.05530	−8.17754	0.19316
1-Pentanol	C ₅ H ₁₂ O	30.6	40.4	66.8	80.1	100.2	117.6	137.5	160.3	196.4	229.6	−8.62225	2.10135	−6.29175	−6.79293
1-Hexanol	C ₆ H ₁₄ O	44.9	55.2	83.0	97.0	118.1	136.4	157.3	181.5	220.1	256.1	−9.17319	4.30846	−10.11890	−0.93221
1-Heptanol	C ₇ H ₁₆ O	59.9	70.3	98.4	112.8	134.7	153.9	176.1	202.0	243.7	282.4	−8.85687	3.21033	−7.48606	−12.12938
1-Octanol	C ₈ H ₁₈ O	72.5	83.4	113.0	128.2	151.2	171.4	194.8	222.1	266.4	307.4	−10.26829	6.70186	−11.65601	−6.37873
Isopropanol	C ₃ H ₈ O	−8.9	−0.3	22.7	34.1	51.1	65.6	81.9	100.4	129.3	155.6	−8.44737	1.17402	−6.97876	0.69248
2-Methyl-1-propanol	C ₄ H ₁₀ O	11.8	20.5	44.2	56.2	74.2	89.7	107.5	127.9	160.2	190.0	−7.82960	0.44510	−5.32308	−10.00835
3-Methyl-1-butanol	C ₅ H ₁₂ O	27.6	36.9	62.3	75.2	94.6	111.5	130.9	153.1	188.4	220.8	−8.27417	1.16334	−5.04768	−11.64372
Ethylene glycol	C ₂ H ₆ O ₂	75.1	86.6	117.3	132.7	155.4	174.8	196.6	221.3	259.7	294.2	−7.85575	1.06762	−5.14271	−1.65660
1,3-Propylene glycol	C ₃ H ₈ O ₂	85.6	97.8	130.2	146.4	170.4	190.9	213.7	239.1	277.7	311.2	−10.42988	2.74631	−2.20347	−6.30476
Glycerol	C ₃ H ₈ O ₃	147.5	160.8	196.2	213.9	239.9	262.2	287.2	315.6	359.8	400.1	−6.94758	−0.33345	−5.98569	−1.33011
Cyclohexanol	C ₆ H ₁₂ O	47.1	57.3	84.8	98.8	120.2	138.9	160.4	185.6	226.3	264.7	−6.96569	0.93439	−5.00403	−10.29700
Benzyl alcohol	C ₇ H ₈ O	74.9	86.7	118.5	134.6	158.8	179.9	204.0	232.0	276.9	319.2	−7.38172	2.18313	−6.78536	−2.57851

D3.1. Table 3. (continued)

Substance	Formula	Vapor pressure in mbar										Equation (7)			
		5	10	50	100	250	500	1,000	2,000	5,000	10,000	A	B	C	D
Phenols															
<i>o</i> -Cresol	C ₇ H ₈ O	60.1	71.8	103.6	119.9	144.4	165.8	190.3	218.6	263.2	303.8	−8.83275	3.46650	−4.36291	−6.10327
<i>m</i> -Cresol	C ₇ H ₈ O	70.8	82.7	114.9	131.2	155.8	177.2	201.7	229.9	274.8	316.1	−8.84466	4.00993	−6.76021	−3.02124
<i>p</i> -Cresol	C ₇ H ₈ O	72.0	83.6	115.2	131.3	155.6	177.0	201.5	229.9	275.0	316.2	−11.38986	9.13086	−10.26796	−3.81158
Phenol	C ₆ H ₆ O	55.5	67.0	98.0	113.8	137.4	158.0	181.4	208.5	251.5	290.9	−10.48951	7.87328	−9.54201	−0.49292
Carboxylic acids															
Formic acid	CH ₂ O ₂			22.3	37.0	59.2	78.4	100.2	125.0	163.7	198.4	−7.48216	0.88805	−0.32253	−2.58053
Acetic acid	C ₂ H ₄ O ₂			41.2	55.7	77.5	96.3	117.5	141.6	179.1	212.5	−9.34304	3.77735	−3.59092	−1.57006
Propionic acid	C ₃ H ₆ O ₂	23.7	34.8	64.3	79.0	100.9	119.7	140.8	164.7	201.7	234.9	−9.05245	2.46694	−4.73604	1.29659
Butyric acid	C ₄ H ₈ O ₂	46.8	57.6	86.8	101.4	123.2	142.0	163.2	187.4	225.0	258.8	−9.92279	3.73064	−6.94231	−1.65235
Valeric acid	C ₅ H ₁₀ O ₂	54.9	66.0	96.0	111.1	133.6	153.1	175.1	200.2	239.3	274.5	−9.07960	1.91018	−4.75458	−4.73450
Caproic acid	C ₆ H ₁₂ O ₂	82.1	93.5	123.9	139.2	162.0	181.7	204.0	229.7	270.3	307.8	−9.90505	4.66763	−11.56156	2.59120
Acetic anhydride	C ₄ H ₆ O ₃	20.7	31.5	60.7	75.5	97.8	117.1	139.1	164.3	204.0	240.2	−8.15436	1.80785	−3.76039	−3.04616
Propionic anhydride	C ₆ H ₁₀ O ₃	37.5	50.2	83.5	99.8	123.8	144.0	166.5	191.9	231.3	267.1	−6.66964	−2.70670	−1.76623	7.54170
Chloroacetic acid	C ₂ H ₃ Cl O ₂	67.3	78.4	108.4	123.5	146.3	166.0	188.6	214.5	255.6	293.3	−10.72534	7.62232	−10.44634	−2.56382
Dichloroacetic acid	C ₂ H ₂ Cl ₂ O ₂	69.5	80.7	111.0	126.5	149.8	170.2	193.5	220.3	262.7	301.1	−10.38040	6.03907	−7.42780	−7.72727
Trichloroacetic acid	C ₂ HCl ₃ O ₂	70.5	82.3	114.1	130.0	153.7	174.1	197.2	223.6	265.1	302.8	−8.80390	2.91469	−6.75915	−0.26065
Ketones															
Ketene	C ₂ H ₂ O	−121.4	−114.9	−97.4	−88.5	−75.0	−63.3	−50.0	−34.6	−10.1	12.6	−5.93228	0.34819	−1.82981	−0.11750
Acetone	C ₃ H ₆ O	−44.6	−35.7	−11.2	1.4	20.3	36.8	55.7	77.5	111.9	143.3	−7.67033	1.96469	−2.44380	−2.90162
Methyl ethyl ketone	C ₄ H ₈ O	−28.9	−19.2	7.4	20.9	41.2	59.0	79.2	102.5	139.4	173.2	−7.89149	2.46953	−3.52510	−0.92713
Diethyl ketone	C ₅ H ₁₀ O	−11.4	−1.3	26.2	40.3	61.6	80.2	101.4	125.9	164.7	200.2	−7.27265	0.63120	−1.64177	−4.36962
Dipropyl ketone	C ₇ H ₁₄ O	18.2	29.3	59.9	75.5	99.2	120.0	143.7	171.1	214.5	254.0	−7.98923	1.58266	−2.61251	−4.38408
Acetophenone	C ₈ H ₈ O	60.3	73.0	107.7	125.4	152.1	175.4	201.9	232.4	280.4	324.2	−6.96667	−0.37241	−0.80507	−4.88404
Benzophenone	C ₁₃ H ₁₀ O	138.2	153.2	194.0	214.8	246.2	273.6	305.0	341.3	398.8	450.9	−10.03049	5.92909	−7.69343	−1.20468
Ethers															
Dimethyl ether	C ₂ H ₆ O	−103.8	−96.7	−77.5	−67.6	−52.8	−39.9	−25.1	−8.0	19.3	44.5	−7.33288	2.67700	−3.40250	−0.11957
Diethyl ether	C ₄ H ₁₀ O	−61.3	−52.8	−29.7	−17.8	0.2	16.0	34.1	55.1	88.7	119.7	−7.55709	2.15613	−3.02766	−2.37858
Dipropyl ether	C ₆ H ₁₄ O	−21.9	−12.0	15.0	28.8	49.9	68.3	89.6	114.2	153.4	189.1	−8.55629	3.49469	−4.22192	−2.61530
Methyl propyl ether	C ₄ H ₁₀ O	−57.9	−49.4	−26.1	−14.1	4.1	20.1	38.5	60.1	94.8	127.1	−8.76101	5.30514	−6.07025	−0.78235
Ethyl propyl ether	C ₅ H ₁₂ O	−39.8	−30.9	−6.3	6.4	25.9	43.2	63.4	87.1	125.2	160.0	−10.68465	8.88906	−8.58949	−2.06505
Ethylene oxide	C ₂ H ₄ O	−76.9	−69.1	−47.9	−37.1	−20.6	−6.2	10.2	29.1	58.9	86.0	−6.39656	−0.13545	0.30047	−4.54866

Furane	C ₄ H ₄ O	−64.6	−55.8	−32.1	−20.1	−2.2	13.3	31.0	51.4	84.1	114.6	−7.98347	4.71720	−6.64737	3.77132
1,4-Dioxane	C ₄ H ₈ O ₂			24.8	39.3	61.0	79.7	101.0	125.4	163.9	199.3	−7.40401	2.12025	−3.88819	1.69876
Aldehydes															
Formaldehyde	CH ₂ O		−90.5	−71.5	−61.7	−47.0	−34.1	−19.4	−2.6	23.8	47.7	−7.46907	1.28290	−0.50464	−4.29089
Acetaldehyde	C ₂ H ₄ O	−71.0	−62.8	−40.7	−29.3	−12.2	2.8	19.9	39.6	70.8	99.2	−7.48323	1.89754	−1.87991	−2.74165
Paraldehyde	C ₆ H ₁₂ O ₃		18.9	47.2	61.6	83.3	102.2	123.8	148.7	188.1	224.3	−8.39247	2.66850	−4.68103	−2.64044
Furfural	C ₅ H ₄ O ₂	32.9	44.7	76.4	92.5	116.6	137.4	160.9	187.8	229.7	267.6	−7.19466	0.15098	−1.29504	−2.81404
Benzaldehyde	C ₇ H ₆ O	42.3	54.5	87.6	104.6	130.2	152.7	178.3	208.0	254.8	297.6	−7.62714	1.75696	−2.27084	−3.91930
Salicylaldehyde	C ₇ H ₆ O ₂	55.1	68.2	103.5	121.3	147.8	170.5	195.8	224.1	267.0	304.2	−10.08822	2.82918	−0.83177	−3.21642
Esters															
Methyl formate	C ₂ H ₄ O ₂	−60.4	−52.1	−29.6	−18.1	−0.8	14.2	31.4	51.2	82.5	111.3	−7.09661	1.33571	−2.14672	−2.79247
Ethyl formate	C ₃ H ₆ O ₂	−43.7	−35.0	−11.4	0.7	19.0	35.1	53.6	75.0	109.1	140.5	−7.17811	1.31054	−2.17904	−4.85150
Propyl formate	C ₄ H ₈ O ₂	−25.1	−15.7	10.0	23.1	43.1	60.6	80.6	103.9	141.1	175.4	−7.55263	1.95726	−3.16613	−3.81792
Methyl acetate	C ₃ H ₆ O ₂	−42.1	−33.2	−9.0	3.3	21.9	38.1	56.6	78.0	112.0	143.2	−8.57584	4.22791	−5.37346	−0.82045
Ethyl acetate	C ₄ H ₈ O ₂	−27.4	−18.0	7.4	20.4	40.0	57.1	76.7	99.4	135.4	168.4	−7.89734	2.16798	−3.52390	−3.10641
Propyl acetate	C ₅ H ₁₀ O ₂	−9.7	0.2	27.0	40.8	61.8	80.1	101.1	125.4	164.0	199.3	−7.89781	1.68898	−2.74051	−5.47967
Methyl propionate	C ₄ H ₈ O ₂	−25.7	−16.2	9.4	22.5	42.2	59.4	79.1	102.0	138.4	172.0	−8.30872	3.53745	−5.20774	−1.27089
Ethyl propionate	C ₅ H ₁₀ O ₂	−11.5	−1.7	25.1	38.8	59.6	77.7	98.5	122.7	161.4	197.0	−8.75519	4.14793	−5.89411	−1.78473
Propyl propionate	C ₆ H ₁₂ O ₂	3.7	14.5	43.6	58.5	80.7	100.1	122.0	147.2	186.8	222.9	−7.79443	0.71065	−2.20915	−2.58752
Methyl butyrate	C ₅ H ₁₀ O ₂	−9.5	0.6	27.9	41.8	62.8	81.2	102.3	126.6	165.6	201.5	−8.52321	3.78350	−5.74769	−0.69681
Ethyl butyrate	C ₆ H ₁₂ O ₂	0.3	11.1	40.6	55.7	78.4	98.3	120.9	147.1	188.5	226.2	−8.18197	2.21896	−3.32406	−2.03342
Methyl benzoate	C ₈ H ₈ O ₂	60.0	72.3	105.8	123.1	149.3	172.4	198.9	229.7	278.6	323.1	−9.52872	5.22508	−5.67192	−4.59960
Ethyl benzoate	C ₉ H ₁₀ O ₂	70.8	83.0	117.0	134.6	161.5	185.3	212.8	244.5	294.5	339.0	−9.49777	3.93518	−3.00984	−10.93022
Methyl salicylate	C ₈ H ₈ O ₃	78.0	89.2	121.0	138.2	165.4	190.4	220.0	254.6	307.4	350.7	−14.30891	11.86128	−2.67256	−30.85630
Amines															
Methyl amine	CH ₅ N	−83.8	−76.8	−57.7	−48.1	−33.5	−21.0	−6.7	9.7	35.4	58.9	−6.93594	0.77016	−2.12846	−3.11687
Ethyl amine	C ₂ H ₇ N	−69.1	−61.3	−40.4	−29.7	−13.6	0.5	16.5	34.9	64.1	90.9	−7.14146	1.24486	−2.55143	−3.09059
Propyl amine	C ₃ H ₉ N	−48.5	−39.7	−16.1	−4.2	13.8	29.5	47.2	67.6	99.9	129.7	−6.32807	−0.41527	−1.86755	−1.82733
<i>n</i> -butyl amine	C ₆ H ₁₅ N	−27.3	−17.9	7.6	20.7	40.3	57.5	77.1	99.8	135.9	169.2	−7.88889	2.67770	−4.27421	−1.85122
Dimethyl amine	C ₂ H ₇ N	−74.4	−67.1	−47.3	−37.2	−22.0	−8.7	6.6	24.4	52.9	79.4	−8.48833	4.67224	−6.24955	−1.96675
Trimethyl amine	C ₃ H ₉ N	−84.8	−77.3	−56.4	−45.5	−28.9	−14.2	2.8	22.6	54.4	83.7	−7.30365	1.94801	−1.34682	−5.07582
Diethyl amine	C ₆ H ₁₅ N	−46.1	−36.9	−12.0	0.7	19.7	36.3	55.2	77.1	111.9	144.1	−7.36200	1.77888	−3.69788	0.28823
Triethyl amine	C ₆ H ₁₅ N	−24.6	−14.5	13.0	27.1	48.4	67.0	88.4	113.1	152.6	189.2	−7.73549	2.33990	−3.77932	−0.63259
Piperidine	C ₅ H ₁₁ N		−0.7	28.1	42.7	64.8	84.0	105.9	131.2	171.2	208.3	−6.79875	1.00957	−2.60941	−0.67208
Pyridine	C ₆ H ₇ N	−2.9	7.6	36.3	51.0	73.2	92.6	114.8	140.4	181.1	218.6	−7.07868	1.45189	−2.11714	−3.20359
Aniline	C ₆ H ₇ N	51.2	63.3	96.0	112.6	137.4	159.0	183.4	211.5	255.6	295.9	−7.86006	1.96206	−3.65571	−2.00622
<i>N</i> -methyl aniline	C ₇ H ₉ N	57.4	69.9	104.0	121.2	147.2	169.7	195.1	224.0	269.0	309.0	−8.99983	2.75304	−2.46251	−3.78980

D3.1. Table 3. (continued)

Substance	Formula	Vapor pressure in mbar										Equation (7)			
		5	10	50	100	250	500	1,000	2,000	5,000	10,000	A	B	C	D
<i>N,N</i> -dimethyl aniline	C ₈ H ₁₁ N	52.0	65.0	100.0	117.7	144.2	167.1	192.9	222.4	268.6	310.8	−6.91926	−0.79562	−1.01346	−1.30692
<i>N,N</i> -diethyl aniline	C ₁₀ H ₁₅ N	73.6	86.6	121.6	139.3	166.0	189.1	215.5	246.0	294.7	340.1	−7.13341	0.21353	−3.88149	−0.98901
Phenylhydrazine	C ₆ H ₈ N ₂	93.8	107.0	143.4	162.1	190.4	215.2	243.4	275.7	325.9	370.0	−10.65944	5.59074	−3.56952	−8.23026
Diphenyl amine	C ₁₂ H ₁₁ N	134.0	149.3	190.7	211.7	243.3	270.7	301.8	337.3	392.8	442.8	−8.75985	2.00629	−3.23950	−3.32510
Nitriles															
Acetonitrile	C ₂ H ₃ N	−31.0	−20.6	7.3	21.4	42.3	60.5	81.0	104.6	141.9	175.9	−9.22263	5.68045	−6.67111	4.51306
Propionitrile	C ₃ H ₅ N	−17.9	−7.7	20.4	34.7	56.5	75.5	97.3	122.3	161.8	197.6	−7.82826	1.87534	−1.74704	−3.40003
Butyronitrile	C ₄ H ₇ N	−2.0	8.6	37.6	52.4	74.8	94.4	117.0	143.0	184.4	222.0	−9.07674	4.63491	−4.96526	−1.94727
Benzonitrile	C ₇ H ₅ N	51.3	63.4	96.8	114.1	140.4	163.6	190.3	221.2	270.1	314.2	−8.76503	3.46762	−2.58071	−7.03902
Amides															
Formamide	CH ₃ NO	82.2	94.8	129.0	146.2	171.9	194.0	219.1	247.6	292.1	332.3	−8.05102	1.89555	−3.34638	−3.18188
Nitroderivates															
Nitromethane	CH ₃ NO ₂	−11.8	−1.7	26.0	40.1	61.3	79.8	100.8	124.9	162.6	196.7	−8.40409	2.96310	−2.55125	−3.12626
Nitrobenzene	C ₆ H ₅ NO ₂	65.8	78.5	113.5	131.4	158.7	182.6	210.2	242.1	292.6	337.8	−11.42180	9.08136	−8.03968	−2.40144
<i>o</i> -Nitrotoluene	C ₇ H ₇ NO ₂	75.0	88.0	123.6	141.8	169.4	193.5	220.9	252.4	301.5	345.5	−9.20649	3.25360	−2.90528	−5.87732
<i>m</i> -Nitrotoluene	C ₇ H ₇ NO ₂	81.8	95.3	132.1	150.9	179.3	204.0	232.1	264.4	314.8	359.8	−9.97904	5.05231	−4.85807	−3.04363
<i>p</i> -Nitrotoluene	C ₇ H ₇ NO ₂	85.1	98.9	136.2	155.3	184.1	209.3	238.1	271.5	324.6	373.0	−9.14840	4.60236	−6.10485	−0.71761