

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
Dinitrogentetroxide	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
Tri bromomethane	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
Dichlorodifluoromethane (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
Trichlorodifluoromethane (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
Chlorotrifluoroethylene	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
m-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
n-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
n-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
n-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
n-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
trans-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
Naphthalenes															
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 ₃	-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 ₃	-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 ₃	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 ₃	-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 ₃	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 ₃ 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
n-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 ₅ 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 ₅ 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
N-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