

## ภาคผนวก จ.

### CRITICAL CONSTANTS

Substance	Symbol	M	$T_c, ^\circ K$	$P_c, \text{atm}$	$v_c \text{ cm}^3/\text{g mol}$ ( $1 \text{ cm}^3/\text{g mol} = 10^{-3} \text{ m}^3/\text{kg mol}$ )	$v_c, \text{ft}^3/\text{lbm mol}$	$Z_c$
Acetylene	$C_2H_2$	26.036	300.5	61.6	113	1.81	0.274
Air		28.967	132.41	37.25	93.25	1.49	0.320
Ammonia	$NH_3$	17.032	405.4	111.3	73.5	1.16	0.243
Argon	A	39.944	150.72	47.996	75	1.20	0.291
Benzene	$C_6H_6$	78.114	562.6	48.6	260	4.17	0.274
n-Butane	$C_4H_{10}$	58.124	425.17	37.47	255	4.08	0.274
Isobutane	$C_4H_{10}$	58.124	408.14	36.00	263	4.21	0.283
1-Butene	$C_4H_8$	56.108	411.6	37.7	240	3.84	0.277
Carbon dioxide	$CO_2$	44.011	304.20	72.90	94	1.51	0.275
Carbon monoxide	CO	28.011	132.91	34.529	93	4.42	0.294
Carbon tetrachloride	$CCl_4$	153.839	556.4	45.0	276	4.42	0.272
n-Decane	$C_{10}H_{22}$	142.176	473.15	21.7	355	11.5	0.237
Dodecane	$C_{12}H_{26}$	170.340	659	17.9			
Ethane	$C_2H_6$	30.070	305.43	48.20	148	2.37	0.285
Ethyl ether	$C_4H_{10}O$	74.124	467.8	35.6	282.9	4.53	0.262
Ethylene	$C_2H_4$	28.054	283.06	50.50	124	1.99	0.270
Freon, F-12	$CCl_2F_2$	120.925	384.16	40.6	217	3.47	0.279
Helium	He	4.003	5.19	2.26	58	0.929	0.308
n-Heptane	$C_7H_{16}$	100.205	540.17	27.00	426	6.82	0.260
n-Hexane	$C_6H_{14}$	86.178	507.5	29.94	368	5.89	0.264
Hydrogen	$H_2$	2.016	33.24	12.707	65	1.04	0.304
Hydrogen sulfide	$H_2S$	34.082	373.7	88.8	98	1.57	0.284
Mercury	Hg	200.610					
Methane	$CH_4$	16.043	190.7	45.8	163	1.59	0.290
Methyl fluoride	$CH_3F$	34.035	317.71	58.0	113	1.81	0.251
Neon	Ne	20.183	44.30	26.96	41.7	0.668	0.308
Nitric oxide	NO	30.008	179.2	65.0	58	0.929	0.256
Nitrogen	$N_2$	28.016	126.2	33.54	90	0.144	0.291
Octane	$C_8H_{18}$	114.232	569.4	24.64	486	7.77	0.256
Oxygen	$O_2$	32.000	154.78	50.14	74	1.19	0.292
n-Pentane	$C_5H_{12}$	72.151	469.78	33.31	311	4.98	0.269
Isopentane	$C_5H_{12}$	72.151	461.0	32.92	308	4.93	0.268
Propane	$C_3H_8$	44.097	370.01	42.1	200	3.20	0.277
Propylene	$C_3H_6$	42.081	365.1	45.40	181	2.90	0.274
Sulfur dioxide	$SO_2$	64.066	430.7	77.8	122	1.95	0.269
Water	$H_2O$	18.016	647.27	218.167	56	0.897	0.230
Xenon	Xe	131.300	289.81	58.0	118.8	1.90	0.290