

APPENDIX H. CONVERSIONS

H.1. Length

1 centimeter	=	0.394 inches
1 inch	=	2.54 cm
1 foot	=	0.3048 meters
1 kilometer	=	0.6214 statute miles
1 kilometer	=	0.5396 nautical miles
1 meter	=	3.281 feet
1 meter	=	1.094 yard
1 nautical mile	=	6076 feet
1 nautical mile	=	1.852 kilometers
1 nautical mile	=	1.1516 statute miles
1 statute mile	=	1.609 kilometers

H.2. Area

1 acre	=	43560 feet ²
1 acre	=	0.4047 hectares
1 hectare	=	2.471 acres
1 hectare	=	10,000 meters ²
1 square kilometer	=	1,000,000 meters ²
1 square kilometer	=	0.3861 miles ²
1 square mile	=	640 acres
1 square mile	=	2.59 kilometers ²
1 square naut. mile	=	848.8 acres
1 square naut. mile	=	1.326 statute miles ²

H.3. Volume

1 barrel	=	35 Imperial gallons (approximate)
1 barrel	=	42 US gallons
1 barrel	=	5.6 feet ³ (approximate)
1 barrel	=	159 liters (approximate)
1 barrel	=	0.16 meters ³ (approximate)
1 cubic foot	=	6.2288 Imperial gallons
1 cubic foot	=	7.4805 US gallons
1 cubic foot	=	0.1781 US barrel

1 cubic foot	=	28.316 liters
1 cubic foot	=	0.02832 meters ³
1 cubic inch	=	16.39 centimeters ³
1 cubic inch	=	0.0164 litre
1 cubic yard	=	0.7645 meters ³
1 liter	=	0.2199 Imperial gallons
1 liter	=	0.2641 US gallons
1 liter	=	0.00629 US barrels
1 liter	=	0.03532 feet ³
1 liter	=	61.023 inches ³
1 liter	=	1000 centimeters ³
1000 liters	=	1 meter ³
1 cubic meter	=	219.97 Imperial gallons
1 cubic meter	=	264.172 US gallons
1 cubic meter	=	6.28 US barrel
1 cubic meter	=	35.31 feet ³
1 cubic meter	=	1000 liters
1 Imperial gallon	=	1.2009 US gallons
1 Imperial gallon	=	0.02859 US barrels
1 Imperial gallon	=	0.1605 feet ³
1 Imperial gallon	=	4.546 liters
1 milliliter	=	1 centimeter ³
1 US gallon	=	0.83268 Imperial gallons
1 US gallon	=	0.02381 US barrel
1 US gallon	=	0.13368 feet ³
1 US gallon	=	3.7853 liters

H.4. Pump Rate

US gallon/min	=	3.78 liters/min
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H.5. Speed

1 knot	=	0.514 meters/second
1 st. mile/hour	=	0.8689 knots
1 mile/hour	=	0.45 meters/second
1 meter/second	=	1.95 knots
1 meter/second	=	2.24 miles/hour

H.6. Weight

1 US gallon	=	8.5 lbs seawater
1 US gallon	=	6.0 lbs gasoline
1 US gallon	=	6.7 lbs diesel
1 US gallon	=	7.3 lbs bunker C
1 Imperial gallon	=	10 lbs seawater
1 Imperial gallon	=	7.2 lbs gasoline
1 Imperial gallon	=	8.1 lbs diesel
1 Imperial gallon	=	8.8 lbs bunker C
1 kilogram	=	2.204 lbs
1 liter water	=	1 kilogram
1 (metric) tonne	=	1000 kilograms/1000 liters
1 (metric) tonne	=	2205 lbs
1 (long) ton	=	1016 kilograms
1 (long) ton	=	2240 lbs
1 (long) ton	=	6.7–8.1 barrels or 280–340 US gallons or 235–280 Imperial gallons of crude oil
1 (long) ton	=	8.2–9.1 barrels or 345–382 US gallons or 290–320 Imperial gallons of gasoline
1 (long) ton	=	6.6–7.0 barrels or 277–294 US gallons or 230–245 Imperial gallons of fuel oil

H.7. Pressure

psi	=	6.897 kPa
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H.8. Power

BTU/hr	=	0.293 watts
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H.9. Application Rate

US gallons/acre	=	9.35 liters/hectare
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H.10. Temperature

$$\begin{aligned} 1 \text{ }^\circ\text{Celsius} &= 5/9 (\text{ }^\circ\text{F} - 32) \\ 1 \text{ }^\circ\text{Fahrenheit} &= 1.8 (\text{ }^\circ\text{C} + 17.8) \\ 1 \text{ }^\circ\text{ Fahrenheit} &= 9/5 \text{ }^\circ\text{C} + 32 \end{aligned}$$

<u>°Celsius</u>	<u>°Fahrenheit</u>
-50	-58
-25	-13
-20	-4
-15	5
-10	14
-5	23
0	32
5	41
10	50
15	59
20	68
25	77
30	86
35	95
40	104
45	113
50	122
75	167
100	212
125	257
150	302
175	347
200	392
225	437
250	482
300	572
400	752
500	932
600	1112
700	1292
800	1472