



# Absorbents International, LLC

## UNIT CONVERSIONS FOR OIL SPILL RESPONSE

### VOLUME

barrel (bbl)	x	42	=	U.S. gallons
barrel	x	0.159	=	cubic metres (m <sup>3</sup> )
barrel	x	5.615	=	cubic feet (ft <sup>3</sup> )
U.S. gallons	x	0.833	=	Imperial gallons
U.S. gallons	x	3.785	=	litres (L)
U.S. gallons	x	0.0038	=	cubic metres
Imperial gallons	x	1.20	=	U.S. gallons
cubic metres	x	6.29	=	barrels
cubic metres	x	264.2	=	U.S. gallons
litres (L)	x	0.2642	=	U.S. gallons

### VOLUMETRIC RATE

bbl/h	x	0.159	=	m <sup>3</sup> /h
bbl/h	x	0.70	=	gallons/min (gpm)
m <sup>3</sup> /h	x	6.29	=	bbl/h
m <sup>3</sup> /h	x	4.40	=	gpm

### AREA

acre	x	43,560	=	square feet (ft <sup>2</sup> )
acre	x	0.0012	=	square nautical miles
acre	x	0.405	=	hectares (ha)
hectare	x	10,000	=	square metres (m <sup>2</sup> )
hectare	x	2.471	=	acre
ft <sup>2</sup>	x	0.0929	=	m <sup>2</sup>
m <sup>2</sup>	x	10.76	=	ft <sup>2</sup>

### SPILL ENCOUNTER RATE

Spill encounter rate (bbl/h)	=	sweep width (ft)
x Skimming speed (knots)		
x slick thickness (mm)		
x 3.55		
Spill encounter rate (m <sup>3</sup> /h)	=	sweep width (m)
x Skimming speed (knots)		
x slick thickness (mm)		
x 1.85		

### LENGTH

inch (in)	x	25.4	=	millimetres (mm)
foot (ft)	x	305	=	millimetres (mm)
foot	x	0.305	=	metres (m)
nautical mile	x	1.15	=	statute mile
nautical mile	x	1,852	=	metres (m)
millimetre	x	0.0394	=	inch
micron (µm)	x	1000	=	millimetre
metre (m)	x	3.281	=	feet (ft)
kilometre	x	0.540	=	nautical mile
kilometre	x	0.621	=	statute mile

### SPEED

knots	x	1.687	=	feet / second (fps)
knots	x	0.514	=	metres/ second (m/s)
knots	x	1.85	=	kilometres / hour
metres / second	x	1.945	=	knots
kilometres / hour	x	0.540	=	knots

### WEIGHT

pounds (lbs)	x	0.454	=	kilograms (kg)
ton	x	2000	=	pounds
kilograms	x	2.20	=	pounds
tonne	x	1000	=	kilograms
lbs/ft	x	1.490	=	kg/m
kg/m	x	0.671	=	lbs/ft

### PRESSURE

pounds/in <sup>2</sup> (psi)	x	0.069	=	bar
bar	x	10 <sup>6</sup>	=	pascals
bar	x	14.5	=	psi

### VOLUME PER AREA (dispersant application)

gallons / acre	x	9.35	=	litres / hectare
litres / m <sup>2</sup>	=	thickness in millimetres (mm)		