

# HASTELLOY® C-22® Alloy

## Hydrochloric Acid

Conc. (wt. %)	50°F	75°F	100°F	125°F	150°F	175°F	200°F	225°F	Boiling
	10°C	24°C	38°C	52°C	66°C	79°C	93°C	107°C	
1	-	-	-	-	-	-	0.01	-	0.07
1.5	-	-	-	-	-	-	-	-	0.46
2	-	-	-	-	0.01	-	-	-	1.54
2.5	-	-	-	-	-	0.01	1.74	-	3.58
3	-	-	-	-	0.01	0.02	-	-	-
3.5	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-
4.5	-	-	-	-	-	-	-	-	-
5	-	-	<0.01	<0.01	0.44	1.39	3.02	-	8.99
7.5	-	-	-	-	-	-	-	-	-
10	-	<0.01	0.01	0.28	1.07	1.99	4.39	-	10.86
15	-	0.07	0.24	0.41	0.98	1.91	4.46	-	11.02
20	-	0.05	0.20	0.32	0.90	1.72	3.38	-	9.73
25	-	0.05	0.20	0.37	0.87	1.45	2.64	-	7.89
30	-	0.04	0.19	0.30	0.63	1.13	-	-	9.03
37	-	0.02	0.12	-	-	-	-	-	8.96

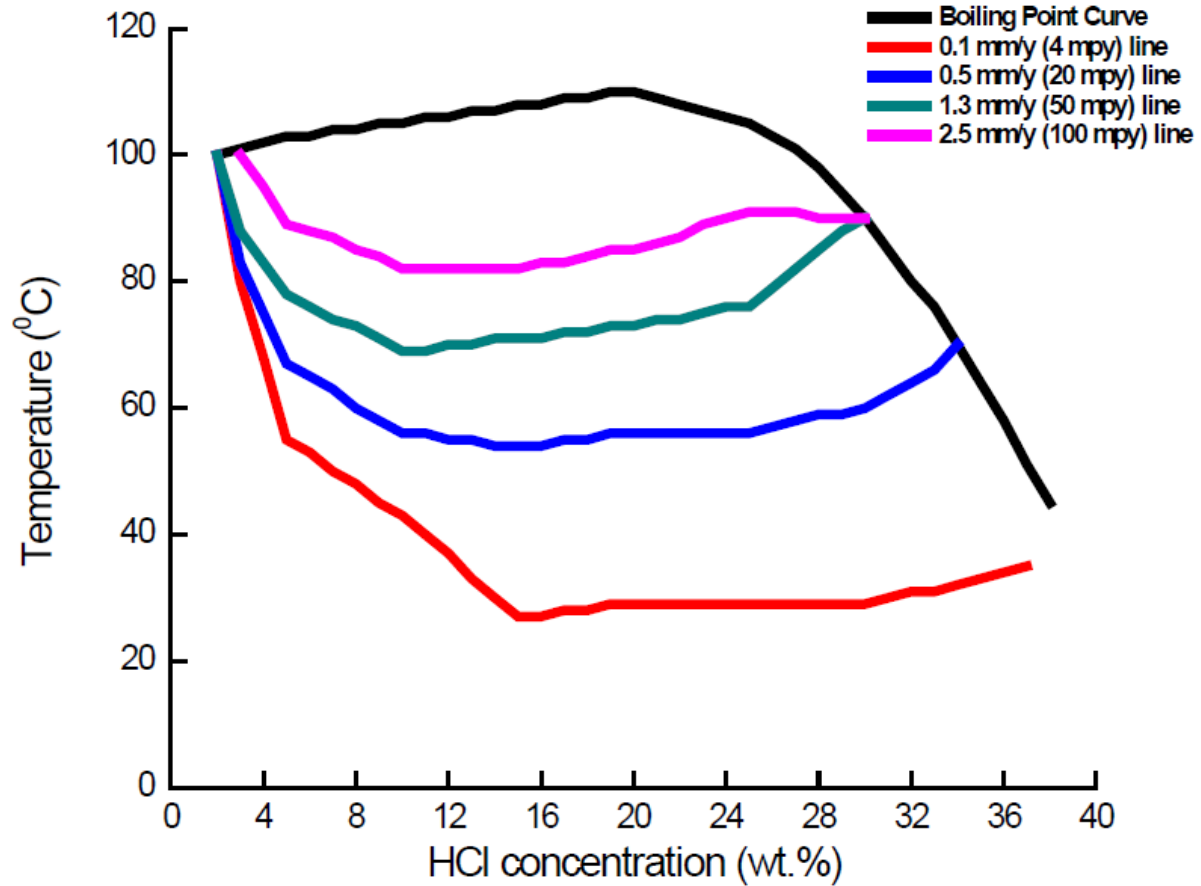
All corrosion rates are in millimeters per year (mm/y); to convert to mils (thousandths of an inch) per year, divide by 0.0254.

Data are from Corrosion Laboratory Job # 114-82, 179-82, 330-82, 361-82, 442-82, 176-83, 335-83, 203-85, 51-88, 62-88, 68-89, 198-89, 162-90, 58-91, 132-91, 30-92, 78-92, 52-96, 14-97, 29-98, 36-98, 2-99, 63-99, 4-00, 6-00, 20-03 and 9-14.

All tests were performed in reagent grade acids under laboratory conditions; field tests are encouraged prior to industrial use.

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## Iso-Corrosion Diagram for C-22® Alloy in Hydrochloric Acid



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