

Suitability of Various Alloy Materials of Construction (Metals) for Handling Sodium Hydroxide Service

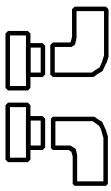
Metals	Suitability
Stainless Steel 304	A to 100% to 125° F A to 100% to 250° F A to 80% to 175° F B/NR 70-90% to 180-300° F A to 60% to 212° F AB 40-70% 212-250° F A to 30% to 250° F
Stainless Steel 316 & 317	AB 70-100% to 125° F B 100% at 347° F NR 25-100% boiling 160-212° F AB 20-70% to 212° F A to 20% to 248° F
Stainless Steel Carpenter 20Cb-3	NR 100% at 210° F B 100% at 300° F A to 100% to 125° F A to 80% to 70° F B/NR 60-80% 160-400° F AB 40-50% to 330° F A to 40% to 212° F B to 40% 300-330° F
Hastelloy B	A to 100% to 200° F NR 80-100% at 300° F, stress cracks A 50-70% to 300° F AB 50-70% 300-380° F A 16-50% to 300° F AB to 15% 230-300° F

A <.002 in. per year (< .05 mm/yr.)

B <.020 in. per year (< .50 mm/yr.)

C <.050 in. per year (<1.27 mm/yr.)

NR >.050 in. per year or explosive (not recommended)



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Hastelloy C/Hastelloy C-276	A to 100% to 70° F A 100% to 200° F AB 50-80% to 170° F BC 50-80% at 175° F AB 5-80% 200° F to boiling A to 50% to 200° F B 10-20% at 225° F C 15% at 230° F A to 5% to 217° F
Nickel	A to 100% to 300° F A to 80% to boiling
Monel	AB 100% to 70° F A to 80% to 300° F AB 40-60% 300-330° F A to 20% to 330° F stress cracks 75-100% >250° F

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B <.020 in. per year (< .50 mm/yr.)

C <.050 in. per year (<1.27 mm/yr.)

NR >.050 in. per year or explosive (not recommended)