



Corrosion resistance of cast irons

№	Aggressive medium	Temperature °C	Test period	Penetrability, mm/year
1.	Water JBr	80±5	500 hours, including under 80°C – 120 h.	0,028
2.	Transformer oil	The same	The same	0,0008
3.	3% solution of KCl	The same	The same	0,072
4.	10% solution of CaCl ₂	The same	The same	0,065
5.	40% solution of KOH	Boiling	hours	0,038
6.	Formation water with saturation by H ₂ S (without oil)	Boiling	hours	0,23
7.	Oil with saturation by H ₂ S	Boiling	hours	0,014
8.	Oil emulsion (1:8)	50±5	500 hours, including under 80°C – 120 h.	0,065
9.	Solution of NaCl (30 g/l)	80±5	500 hours, including under 80°C – 120 h	0,024
10.	Diesel oil	45±5	500 hours, including under 80°C – 120 h.	0,0003
11.	Ammonia water (25% solution)	20	hours	0,0013
12.	40% solution of NaOH	Boiling	500 hours, including under boiling – 120 h.	0,014
13.	Cyclohexanone	Boiling	hours	0,0004
14.	Phenolic water (80 g/l)	20	hours	0,022
15.	Xylene	20	hours	0,0003
16.	Hydrogen peroxide (30% solution of H ₂ O ₂)	20	hours	0,023
17.	Lime milk	20	hours	0,023
18.	62% solution of LiBr	20	hours	0,0006
19.	Antifreeze 60	80±5	500 hours, including under 80°C – 120 h. /	0,0008
20.	Sea-water	Actual test	hours	0,03 – 0,05
21.	Sulfo-salicylic acid	18	hours	0,439
22.	40% solution of NaOH	22	hours	0,00075 – 0,00159
23.	5% solution of AlCl ₃	25	hours	0,027 – 0,486
24.	10% solution of CaCl ₂	27	hours	0,0132 – 0,0252
25.	3% solution of Na ₃ PO ₄	27	hours	0,03 – 0,1
26.	10% solution of (NH ₄) ₂ SO ₄	27	hours	0,0218 – 0,0349
27.	50% solution of CH ₃ COOH	24	hours	0,0446 – 0,0349
28.	4% solution of Fe ₂ (SO ₄) ₃	18	hours	0,0446 – 0,0503
29.	10 % solution of Na ₂ SO ₄	18	hours	0,0204 – 0,022
30.	5% solution of Al ₂ (SO ₄) ₃ /	15	hour	0,04 – 0,05