

COMPONENTS: (1) Nickel, bis(4-amino-N-2-thiazolylbenzenesulfonamidato- $\underline{N^N},O$)-hydrate; $C_{18}H_{16}N_6NiO_4S_4 \cdot nH_2O$; [84812-76-0] (2) Hydrochloric acid; HCl; [7647-01-0] (3) Water; H_2O ; [7732-18-5]	ORIGINAL MEASUREMENTS: Tskitishvili, M. G.; Shvelashvili, A. E.; Mikadze, I. I.; Zhorzholiani, N. B.; Chrelashvili, M. V. <i>Izv. Akad. Nauk Gruz. SSR. Ser. Khim.</i> <u>1981</u> , 7(4), 300-4.																																				
VARIABLES: pH	PREPARED BY: R. Piekos																																				
EXPERIMENTAL VALUES: <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="border-top: 1px solid black; border-bottom: 1px solid black;">Concentration of HCl (mol/l)</th> <th style="border-top: 1px solid black; border-bottom: 1px solid black;">pH</th> <th style="border-top: 1px solid black; border-bottom: 1px solid black;">$10^{12} K_{SO}$ at 25°C</th> </tr> </thead> <tbody> <tr><td>2.5×10^{-2}</td><td>6.62</td><td>3.29</td></tr> <tr><td>1.0×10^{-2}</td><td>7.28</td><td>3.24</td></tr> <tr><td>5.0×10^{-3}</td><td>8.01</td><td>3.23</td></tr> <tr><td>2.5×10^{-3}</td><td>8.30</td><td>3.22</td></tr> <tr><td>1.0×10^{-3}</td><td>8.78</td><td>3.22</td></tr> <tr><td>5.0×10^{-4}</td><td>8.80</td><td>3.30</td></tr> <tr><td>2.5×10^{-4}</td><td>8.89</td><td>3.28</td></tr> <tr><td>1.0×10^{-4}</td><td>8.90</td><td>3.25</td></tr> <tr><td>5.0×10^{-5}</td><td>8.90</td><td>3.23</td></tr> <tr><td>2.5×10^{-5}</td><td>8.90</td><td style="border-bottom: 1px solid black;">3.22</td></tr> <tr> <td></td> <td>Mean</td> <td>3.25</td> </tr> </tbody> </table>		Concentration of HCl (mol/l)	pH	$10^{12} K_{SO}$ at 25°C	2.5×10^{-2}	6.62	3.29	1.0×10^{-2}	7.28	3.24	5.0×10^{-3}	8.01	3.23	2.5×10^{-3}	8.30	3.22	1.0×10^{-3}	8.78	3.22	5.0×10^{-4}	8.80	3.30	2.5×10^{-4}	8.89	3.28	1.0×10^{-4}	8.90	3.25	5.0×10^{-5}	8.90	3.23	2.5×10^{-5}	8.90	3.22		Mean	3.25
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METHOD/APPARATUS/PROCEDURE: The earlier described apparatus and method was used (1): in a glass vessel, a mixt of 100 ml of HCl of appropriate concn and the solute were placed and shaken for 6 h in a water thermostat at 25°C. After attaining equilibrium, the pH of the soln was measured and the Ni^{2+} and S content was determined to calculate K_{SO} . The pH was measured on a pH-673 pH meter.	SOURCE AND PURITY OF MATERIALS: 0.1M solns of chemically pure $Ni(OAc)_2$, monosodium salt of sulfathiazole, and HCl as well as doubly distd water were used. The source of the materials was not specified. ESTIMATED ERROR: K_{SO} : std deviation 1×10^{-13} (compiler). Temp and pH: not specified. REFERENCES: 1. Tskitishvili, M. G.; Mikadze, I. I. <i>Soobshch. Akad. Nauk Gruz. SSR</i> <u>1978</u> , 89(3), 589.																																				