

COMPONENTS: (1) 2-Hexene; C ₆ H ₁₂ ; [592-43-8] (2) Water; H ₂ O; [7732-18-5]	ORIGINAL MEASUREMENTS: Natarajan, G.S.; Venkatachalam, K.A. <i>J. Chem. Eng. Data</i> <u>1972</u> , <i>17</i> , 328-9.																
VARIABLES: Temperature: 20-30°C	PREPARED BY: M.C. Haulait-Pirson, G.T. Hefter																
EXPERIMENTAL VALUES: Solubility of 2-hexene in 0.001 mol/L HNO ₃ solution. <table border="1" data-bbox="249 576 1206 842"> <thead> <tr> <th>t/°C</th> <th>10⁴ mol/L sln^a</th> <th>10³ g(l)/100 g sln^b (compiler)</th> <th>10⁵ x₁ (compiler)</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>8.75 ± 0.21</td> <td>7.4</td> <td>1.6</td> </tr> <tr> <td>25</td> <td>7.99 ± 0.23</td> <td>6.7</td> <td>1.4</td> </tr> <tr> <td>30</td> <td>6.60 ± 0.26</td> <td>5.5</td> <td>1.2</td> </tr> </tbody> </table> <p data-bbox="173 891 1089 915">^a Uncertainties stated to be "standard deviations from means".</p> <p data-bbox="173 923 1131 948">^b Assuming a solution density of 1.00 g mL⁻¹ at all temperatures.</p> <p data-bbox="173 1001 1279 1132"><u>Compiler's note:</u> Although the data have not been measured in pure water the low concentration of the added acid is unlikely to cause the olefin solubility to differ markedly from that in pure water. Further solubility data are given in the paper for 0.05 and 0.1 mol L⁻¹ HCl.</p>		t/°C	10 ⁴ mol/L sln ^a	10 ³ g(l)/100 g sln ^b (compiler)	10 ⁵ x ₁ (compiler)	20	8.75 ± 0.21	7.4	1.6	25	7.99 ± 0.23	6.7	1.4	30	6.60 ± 0.26	5.5	1.2
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METHOD/APPARATUS/PROCEDURE: 15 mL of the aqueous medium was equilibrated with 1 mL of (1) by mechanical shaking in a thermostatted glass burette. After settling (judged visually), 5 mL of the aqueous layer was withdrawn and the olefin content determined by titration with bromine using standard procedures.	SOURCE AND PURITY OF MATERIALS: (1) Prepared by dehydration of 2-hexanol and then washed, dried and fractionated. Purity (no specification) was determined by chromatography. (2) Not specified. <table border="1" data-bbox="733 1598 1285 1733"> <tbody> <tr> <td> ESTIMATED ERROR: Temp. ± 0.05 K Soly. see table above. </td> </tr> <tr> <td> REFERENCES: </td> </tr> </tbody> </table>	ESTIMATED ERROR: Temp. ± 0.05 K Soly. see table above.	REFERENCES:														
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