

<b>COMPONENTS:</b>  (1) Tridecane; C <sub>13</sub> H <sub>28</sub> ; [629-50-5] (2) Water; H <sub>2</sub> O; [7732-18-5]	<b>ORIGINAL MEASUREMENTS:</b>  Schatzberg, P. <i>J. Phys. Chem.</i> <u>1963</u> , <i>67</i> , 776-9.									
<b>VARIABLES:</b>  Temperature: 25-40°C	<b>PREPARED BY:</b>  M.C. Haulait-Pirson									
<b>EXPERIMENTAL VALUES:</b>  <p style="text-align: center;">Solubility of water in tridecane</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;"><u>t/°C</u></th> <th style="text-align: center;"><u>mg(2)/kg sln</u></th> <th style="text-align: center;"><u>x<sub>2</sub></u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">25</td> <td style="text-align: center;">60<sup>a</sup></td> <td style="text-align: center;">6.1 x 10<sup>-4</sup></td> </tr> <tr> <td style="text-align: center;">40</td> <td style="text-align: center;">123<sup>b</sup></td> <td style="text-align: center;">12.6 x 10<sup>-4</sup></td> </tr> </tbody> </table> <p><sup>a</sup> See "Estimated Error"</p>		<u>t/°C</u>	<u>mg(2)/kg sln</u>	<u>x<sub>2</sub></u>	25	60 <sup>a</sup>	6.1 x 10 <sup>-4</sup>	40	123 <sup>b</sup>	12.6 x 10 <sup>-4</sup>
<u>t/°C</u>	<u>mg(2)/kg sln</u>	<u>x<sub>2</sub></u>								
25	60 <sup>a</sup>	6.1 x 10 <sup>-4</sup>								
40	123 <sup>b</sup>	12.6 x 10 <sup>-4</sup>								
<b>AUXILIARY INFORMATION</b>										
<b>METHOD/APPARATUS/PROCEDURE:</b>  (1) was saturated by storing over a layer of (2) in a brown glass bottle without any agitation. The bottle was sealed with serum cap and completely submerged in the water-bath for 7 days. A 20-mL sample was withdrawn with a silicone-hydrophobized hypodermic syringe. Stabilized Karl Fischer reagent diluted to a titer of 1.0-1.3 mg(2)/mL was used to titrate (2) in (1) directly in the presence of methanol to a "dead-stop" end-point using a Beckman KF3 automatic titrimeter.	<b>SOURCE AND PURITY OF MATERIALS:</b>  (1) Phillips Petroleum Co.; research grade; 99.73 mole %; passed repeatedly through a column of silica gel until no absorption occurred in the 220 to 340 nm spectral range. (2) distilled and deionized.									
<b>ESTIMATED ERROR:</b> temp. ± 0.02°C soly. a) 0-6%; b) 0-2% (deviations from the mean)										
<b>REFERENCES:</b>										