

COMPONENTS: (1) Diethylbenzene; $C_{10}H_{14}$; [25340-17-4] (2) Water; H_2O ; [7732-18-5]	ORIGINAL MEASUREMENTS: Englin, B.A.; Plate, A.F.; Tugolukov, V.M.; Pryanishnikova, M.A. <i>Khim. Tekhnol. Topl. Masei</i> <u>1965</u> , 10, 42-6.																					
VARIABLES: Temperature: 0-50°C	PREPARED BY: A. Maczynski and Z. Maczynska																					
EXPERIMENTAL VALUES: <p style="text-align: center;">Solubility of Water in Diethylbenzene (isomer not specified)</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>$t/^\circ C$</th> <th>$g(2)/100\ g\ sln$</th> <th>$10^3\ x_2$ (compiler)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0.0159</td> <td>1.57</td> </tr> <tr> <td>10</td> <td>0.0226</td> <td>2.23</td> </tr> <tr> <td>20</td> <td>0.0319</td> <td>3.15</td> </tr> <tr> <td>30</td> <td>0.0431</td> <td>4.25</td> </tr> <tr> <td>40</td> <td>0.0574</td> <td>5.65</td> </tr> <tr> <td>50</td> <td>0.0756</td> <td>7.43</td> </tr> </tbody> </table>		$t/^\circ C$	$g(2)/100\ g\ sln$	$10^3\ x_2$ (compiler)	0	0.0159	1.57	10	0.0226	2.23	20	0.0319	3.15	30	0.0431	4.25	40	0.0574	5.65	50	0.0756	7.43
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METHOD/APPARATUS/PROCEDURE: Component (1) was introduced into a thermostatted flask and saturated for 5 hr. with (2). Next, calcium hydride was added and the evolving hydrogen volume measured and hence the concentration of (2) in (1) was evaluated.	SOURCE AND PURITY OF MATERIALS: (1) Not specified. (2) Not specified. ESTIMATED ERROR: Not specified. REFERENCES:																					