

| COMPONENTS: (1) Acetamide, N-[[4-(acetylamino)phenyl]-sulfonyl]-N-(4-methoxy-1,2,5-thiadiazol-3-yl)- (N ¹ , N ⁴ -diacetylsulfametrole); C ₁₃ H ₁₄ N ₄ O ₅ S ₂ ; [84930-18-7] (2) Phosphoric acid, disodium salt; Na ₂ HPO ₄ ; [7558-94-4] (3) Phosphoric acid, monopotassium salt; KH ₂ PO ₄ ; [7778-77-0] (4) Water; H ₂ O; [7732-18-5] | ORIGINAL MEASUREMENTS: Hekster, Ch. A.; Vree, T. B. <i>Antibiotics Chemother.</i> <u>1982</u> , <i>31</i> , 22-118. | | | | | | | | | | | |
|--|---|--|--------------------|--|------|--|-----|------|------|------------------|------|------|
| VARIABLES: <p style="text-align: center;">pH</p> | PREPARED BY: <p style="text-align: center;">R. Piekos</p> | | | | | | | | | | | |
| EXPERIMENTAL VALUES: <table border="1" style="margin: 20px auto; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="text-align: center;">pH</th> <th colspan="2" style="text-align: center;">Solubility at 25°C</th> </tr> <tr> <th style="text-align: center;">mg/l</th> <th style="text-align: center;">10⁵ mol dm⁻³ a</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">5.5</td> <td style="text-align: center;">22.7</td> <td style="text-align: center;">6.12</td> </tr> <tr> <td style="text-align: center;">7.5^b</td> <td style="text-align: center;">20.5</td> <td style="text-align: center;">5.53</td> </tr> </tbody> </table> <p style="margin-left: 40px;">^aCalculated by compiler.</p> <p style="margin-left: 40px;">^bErroneous pH value of 7.0 is given in the article.</p> | | pH | Solubility at 25°C | | mg/l | 10 ⁵ mol dm ⁻³ a | 5.5 | 22.7 | 6.12 | 7.5 ^b | 20.5 | 5.53 |
| pH | Solubility at 25°C | | | | | | | | | | | |
| | mg/l | 10 ⁵ mol dm ⁻³ a | | | | | | | | | | |
| 5.5 | 22.7 | 6.12 | | | | | | | | | | |
| 7.5 ^b | 20.5 | 5.53 | | | | | | | | | | |
| AUXILIARY INFORMATION | | | | | | | | | | | | |
| METHOD/APPARATUS/PROCEDURE: The earlier developed method (1) was used (personal communication). Satd solns of N ¹ , N ⁴ -diacetylsulfametrole were prepd in phosphate buffers of pH 5.5 and 7.5 at 25°C. The concn of the solute was measured by means of a Spectra Physics 3500B high-performance liquid chromatograph equipped with a Model 748 column oven and a Pye-Unicam LC-UV spectrophotometric detector. | SOURCE AND PURITY OF MATERIALS: Neither source nor the purity of the materials was specified. | | | | | | | | | | | |
| | ESTIMATED ERROR: Soly: the detection limit of the solute by HPLC was 0.5 mg/l (authors). The errors in temp and pH were not specified. | | | | | | | | | | | |
| | REFERENCES: 1. Hekster, Y.A.; Vree, T. B.; Damsma, J.E.; Friesen, W. T. <i>J. Antimicrob. Chemother.</i> <u>1981</u> , <i>8</i> , 133. | | | | | | | | | | | |