TABLE II. Viscosities of poly(vinyl alcohol)-solvent systems in acetic acid different temperatures

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *c*(CH3COOH) / mol dm-3 | Temperature, K | | | | |
| 305 | 308 | 313 | 318 | 323 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Viscosity ×104, Pa s | | | | | |
| 0.1 % (w/v) PVOH in water | | | | | |
| 0.1 | 8.4955 | 7.6506 | 6.9522 | 6.3164 | 5.7911 |
| 0.2 | 8.4203 | 7.6073 | 6.8946 | 6.2775 | 5.7736 |
| 0.3 | 8.3450 | 7.5625 | 6.8766 | 6.2359 | 5.7537 |
| 0.4 | 8.3238 | 7.4924 | 6.7886 | 6.2196 | 5.7367 |
| 0.5 | 8.2203 | 7.4215 | 6.7705 | 6.2032 | 5.7208 |
| 0.5 % (w/v) PVOH in water | | | | | |
| 0.1 | 11.346 | 9.8729 | 8.8521 | 7.9971 | 7.4247 |
| 0.2 | 11.194 | 9.3966 | 8.6899 | 7.9579 | 7.2915 |
| 0.3 | 10.660 | 9.3548 | 8.4099 | 7.6965 | 7.1323 |
| 0.4 | 10.175 | 8.7773 | 8.0606 | 7.3238 | 6.8165 |
| 0.5 | 9.9133 | 8.6793 | 7.7369 | 7.0634 | 6.7988 |
| 0.1 % (w/v) PVOH in 5 % (v/v) methanol | | | | | |
| 0.1 | 8.8975 | 8.1035 | 7.3649 | 6.4649 | 6.0335 |
| 0.2 | 8.7459 | 7.9636 | 7.1867 | 6.4218 | 6.0186 |
| 0.3 | 8.6307 | 7.9290 | 7.1493 | 6.3733 | 6.0081 |
| 0.4 | 8.5576 | 7.7821 | 7.1295 | 6.3239 | 5.9919 |
| 0.5 | 8.4616 | 7.7430 | 7.0934 | 6.2945 | 5.9758 |
| 0.5 % (w/v) PVOH in 5 % (v/v) methanol | | | | | |
| 0.1 | 11.735 | 10.107 | 9.1241 | 8.2154 | 7.5208 |
| 0.2 | 11.257 | 9.8290 | 9.0884 | 7.9622 | 7.3473 |
| 0.3 | 10.697 | 9.4095 | 8.6304 | 7.7051 | 7.2316 |
| 0.4 | 10.377 | 9.1472 | 8.3600 | 7.4015 | 7.0243 |
| 0.5 | 10.036 | 8.9047 | 8.0560 | 7.2220 | 6.8848 |
| 0.1 % (w/v) PVOH in 5 % (v/v) ethanol | | | | | |
| 0.1 | 9.0551 | 8.1259 | 7.4021 | 6.5629 | 6.1528 |
| 0.2 | 8.8573 | 8.0618 | 7.2488 | 6.4621 | 6.0784 |
| 0.3 | 8.7602 | 7.9975 | 7.2109 | 6.4248 | 6.0642 |
| 0.4 | 8.6360 | 7.9322 | 7.2006 | 6.4323 | 6.0500 |
| 0.5 | 8.5680 | 7.7939 | 7.1375 | 6.3086 | 6.0129 |
| 0.5 % (w/v) PVOH in 5 % (v/v) ethanol | | | | | |
| 0.1 | 11.844 | 10.477 | 9.3657 | 8.3232 | 7.5689 |
| 0.2 | 11.452 | 10.215 | 9.1315 | 8.0458 | 7.4873 |
| 0.3 | 10.711 | 9.7289 | 8.8361 | 7.7752 | 7.3017 |
| 0.4 | 10.465 | 9.3401 | 8.3837 | 7.4744 | 6.9148 |
| 0.5 | 10.225 | 9.0515 | 8.2048 | 7.4175 | 6.9005 |
| 0.1 % (w/v) PVOH in 5 % (v/v) 2-propanol | | | | | |
| 0.1 | 9.4933 | 8.4624 | 7.4314 | 6.7819 | 6.2183 |
| 0.2 | 8.9658 | 8.1134 | 7.3256 | 6.5601 | 6.1431 |
| 0.3 | 8.8806 | 8.0622 | 7.2812 | 6.5664 | 6.1045 |
| 0.4 | 8.7790 | 7.9491 | 7.2497 | 6.5525 | 6.0804 |
| 0.5 | 8.6734 | 7.8950 | 7.2123 | 6.4451 | 6.0496 |
| 0.5 % (w/v) PVOH in 5 % (v/v) 2-propanol | | | | | |
| 0.1 | 12.528 | 10.908 | 9.5013 | 8.6505 | 7.8983 |
| 0.2 | 11.956 | 10.642 | 9.3713 | 8.2181 | 7.5188 |
| 0.3 | 11.486 | 10.105 | 9.0263 | 8.0223 | 7.3712 |
| 0.4 | 10.557 | 9.5684 | 8.4600 | 7.6364 | 7.1063 |
| 0.5 | 10.442 | 9.1295 | 8.2493 | 7.5047 | 7.0135 |
| 0.1 % (w/v) PVOH in 5 % (v/v) 1-butanol | | | | | |
| 0.1 | 9.6291 | 8.5282 | 7.7188 | 7.0517 | 6.2613 |
| 0.2 | 9.3975 | 8.2666 | 7.5597 | 6.8168 | 6.1624 |
| 0.3 | 9.1422 | 8.1258 | 7.4056 | 6.7814 | 6.1066 |
| 0.4 | 8.9931 | 8.0340 | 7.2746 | 6.7432 | 6.0913 |
| 0.5 | 8.8968 | 7.9451 | 7.1689 | 6.6649 | 6.0789 |
| 0.5 % (w/v) PVOH in 5 % (v/v) 1-butanol | | | | | |
| 0.1 | 12.867 | 11.059 | 9.9622 | 8.9643 | 7.9196 |
| 0.2 | 12.202 | 10.770 | 9.5972 | 8.3088 | 7.6606 |
| 0.3 | 11.673 | 10.298 | 9.2262 | 8.1265 | 7.4743 |
| 0.4 | 11.144 | 9.7108 | 8.5635 | 7.6786 | 7.1076 |
| 0.5 | 10.667 | 9.4904 | 8.3123 | 7.5473 | 7.0783 |

mean ± standard deviation = 8.1199 ± 1.5247