|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **12\_MANGANOMETRIE** | | | | |  | |  | |  | |  | |  | |  | |
| 1. **Stanovení koncentrace 0,002m KMnO4**  * titrace byla provedena pouze 1×      * navážka K4[Fe(CN)3]·3H2O mN = **400,5 mg**  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | V (ml) | E (V) | V (ml) | E (V) | V (ml) | E (V) | V (ml) | E (V) | | 0,000 | 0,437 | 8,600 | 0,510 | 10,000 | 1,019 | 15,000 | 1,097 | | 1,000 | 0,444 | 8,700 | 0,513 | 10,100 | 1,033 | 16,000 | 1,101 | | 2,000 | 0,450 | 8,800 | 0,515 | 10,200 | 1,037 | 17,000 | 1,104 | | 3,000 | 0,457 | 8,900 | 0,518 | 10,300 | 1,042 | 18,000 | 1,107 | | 4,000 | 0,463 | 9,000 | 0,522 | 10,400 | 1,046 | 19,000 | 1,110 | | 5,000 | 0,469 | 9,100 | 0,526 | 10,500 | 1,049 | 20,000 | 1,111 | | 6,000 | 0,477 | 9,200 | 0,530 | 10,600 | 1,052 |  |  | | 7,000 | 0,487 | 9,300 | 0,536 | 10,700 | 1,055 |  |  | | 8,000 | 0,500 | 9,400 | 0,543 | 10,800 | 1,058 |  |  | | 8,100 | 0,501 | 9,500 | 0,552 | 10,900 | 1,060 |  |  | | 8,200 | 0,503 | 9,600 | 0,561 | 11,000 | 1,062 |  |  | | 8,300 | 0,505 | 9,700 | 0,594 | 12,000 | 1,079 |  |  | | 8,400 | 0,506 | 9,800 | 0,942 | 13,000 | 1,087 |  |  | | 8,500 | 0,508 | 9,900 | 0,987 | 14,000 | 1,092 |  |  | | | |  | | M (PbCl2) = 278,1 g/mol | | | |  | |  | |  | |  | |
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|  |  |  | |  | |  | |  | |  | |  | |  | |  | |
| *Obr. 1**Ukázka standardizace 0,002M KMnO4 pomocí programu LabView*   1. **Stanovení koncentrace Fe2+ v neznámém vzorku**  * neznámý vzorek byl v 50 ml odměrné baňce doplněn po rysku dest.vodou * titrace byla provedena pouze 1× | | | | |  | |  | |  | |  | |  | |  | |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | V (ml) | E (V) | V (ml) | E (V) | V (ml) | E (V) | V (ml) | E (V) | | 0,000 | 0,534 | 8,000 | 0,548 | 9,700 | 0,572 | 11,400 | 1,097 | | 1,000 | 0,535 | 8,100 | 0,549 | 9,800 | 0,577 | 11,500 | 1,099 | | 2,000 | 0,536 | 8,200 | 0,550 | 9,900 | 0,592 | 11,600 | 1,100 | | 3,000 | 0,537 | 8,300 | 0,550 | 10,000 | 0,645 | 11,700 | 1,102 | | 4,000 | 0,539 | 8,400 | 0,551 | 10,100 | 0,964 | 11,800 | 1,104 | | 5,000 | 0,541 | 8,500 | 0,551 | 10,200 | 1,029 | 11,900 | 1,110 | | 6,000 | 0,543 | 8,600 | 0,552 | 10,300 | 1,043 | 12,000 | 1,111 | | 7,000 | 0,546 | 8,700 | 0,553 | 10,400 | 1,051 | 13,000 | 1,115 | | 7,100 | 0,546 | 8,800 | 0,554 | 10,500 | 1,065 | 14,000 | 1,119 | | 7,200 | 0,546 | 8,900 | 0,554 | 10,600 | 1,073 | 15,000 | 1,123 | | 7,300 | 0,546 | 9,000 | 0,556 | 10,700 | 1,079 | 16,000 | 1,125 | | 7,400 | 0,546 | 9,100 | 0,557 | 10,800 | 1,082 | 17,000 | 1,128 | | 7,500 | 0,547 | 9,200 | 0,558 | 10,900 | 1,086 | 18,000 | 1,131 | | 7,600 | 0,547 | 9,300 | 0,560 | 11,000 | 1,090 | 19,000 | 1,133 | | 7,700 | 0,548 | 9,400 | 0,563 | 11,100 | 1,091 | 20,000 | 1,134 | | 7,800 | 0,548 | 9,500 | 0,565 | 11,200 | 1,093 | 21,000 | 1,136 | | 7,900 | 0,548 | 9,600 | 0,568 | 11,300 | 1,095 | 22,000 | 1,139 |     *Obr. 2**Ukázka standardizace 0,002M KMnO4 pomocí programu LabView* |  |  | |  | |  | |  | |  | |  | |  | |  | |