|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **[H2O2]0** | | **Vol of solution (L)** | **rate (slope, mL O2/s)** | | **rate  (mol O2/s)** | | **rate  (mol H2O2/s)** | **rate (M H2O2/s)** | **rate constant, *k*** | |
| **Trial 1** | 0.882 | | 0.05 | 0.1194 | | 4.8011 x 10-6 | | 9.602 x 10-6 | 1.920 x10-4 | 2.18 x 10-4 | |
| **Trial 2** | 0.7056 | | 0.05 | 0.0907 | | 3.6472 x 10-6 | | 7.294 x 10-6 | 1.459 x 10-4 | 2.07 x 10-4 | |
| **Trial 3** | 0.5292 | | 0.05 | 0.0757 | | 3.0450 x 10-6 | | 6.090 x 10-6 | 1.218 x 10-4 | 2.30 x 10-4 | |
| **Trial 4** | 0.3528 | | 0.05 | 0.0523 | | 2.1030 x 10-6 | | 4.206 x 10-6 | 8.412 x 10-5 | 2.38 x 10-4 | |
| **Trial 5** | 0.1764 | | 0.05 | 0.0256 | | 1.0289 x 10-6 | | 2.058 x 10-6 | 4.115 x 10-5 | 2.33 x 10-4 | |
|  | |  | | |  | |  | | Average value *k*: | | **2.25 x 10-4** | |