**Table 5** Dynamic parameters of different coal samples

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sample | *f* (*α*) | | | *G* (*α*) | | | (J/mol) |  |
| *R* | *E*a (J/mol) | *A* | *R* | *E*a (J/mol) | *A* |
| W1P0 | 0.978 | 194988 | 895522 | 0.981 | 193042 | 772540 | 193818 | 834031 |
| W1P1 | 0.981 | 187663 | 852468 | 0.958 | 171218 | 647329 | 179047 | 749898 |
| W1P2 | 0.998 | 170611 | 751641 | 0.998 | 167876 | 620905 | 169243 | 686273 |
| W1P4 | 0.975 | 186108 | 843449 | 0.984 | 168375 | 628740 | 177242 | 736095 |
| W1P6 | 0.983 | 164135 | 719065 | 0.997 | 184629 | 718951 | 184034 | 719008 |
| W5P0 | 0.969 | 198821 | 916204 | 0.991 | 199270 | 805664 | 199045 | 860934 |
| W5P1 | 0.980 | 182932 | 825210 | 0.978 | 169830 | 635634 | 176382 | 730422 |
| W5P2 | 0.969 | 174959 | 781021 | 0.973 | 157433 | 568686 | 166196 | 674854 |
| W5P4 | 0.978 | 186848 | 846074 | 0.98 | 167103 | 622180 | 176976 | 734127 |
| W5P6 | 0.967 | 184953 | 839646 | 0.975 | 177412 | 685677 | 181182 | 762661 |
| W10P0 | 0.967 | 182625 | 827001 | 0.988 | 183523 | 721052 | 183074 | 774026 |
| W10P1 | 0.969 | 174635 | 779574 | 0.973 | 156245 | 564392 | 165441 | 671983 |
| W10P2 | 0.964 | 161566 | 706174 | 0.967 | 159238 | 577753 | 160402 | 641964 |
| W10P4 | 0.94 | 169098 | 749210 | 0.974 | 171700 | 645557 | 170402 | 697384 |
| W10P6 | 0.961 | 179665 | 810521 | 0.978 | 178634 | 693915 | 179150 | 752218 |
| W15P0 | 0.979 | 190648 | 870034 | 0.984 | 173197 | 775684 | 181922 | 822859 |
| W15P1 | 0.968 | 177803 | 798010 | 0.974 | 177811 | 684536 | 177807 | 741273 |
| W15P2 | 0.964 | 169929 | 752894 | 0.974 | 170628 | 641525 | 170279 | 697209 |
| W15P4 | 0.958 | 179191 | 806297 | 0.985 | 164658 | 611910 | 171925 | 709103 |
| W15P6 | 0.968 | 183099 | 825960 | 0.978 | 169555 | 634607 | 176327 | 730283 |
| W20P0 | 0.978 | 194988 | 895522 | 0.981 | 193042 | 772540 | 194015 | 834031 |
| W20P1 | 0.986 | 191421 | 873199 | 0.982 | 181444 | 703271 | 186433 | 788235 |
| W20P2 | 0.984 | 181960 | 821695 | 0.979 | 161241 | 594476 | 171601 | 708085 |
| W20P4 | 0.975 | 177869 | 799789 | 0.978 | 171093 | 649766 | 174481 | 724778 |
| W20P6 | 0.981 | 206827 | 960224 | 0.964 | 173471 | 659682 | 190149 | 809953 |