**Table S2.** Central composite design quadratic polynomial model, experimental data and actual values.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **A/Time(h)** | **B/Temperature (°C)** | **C/ Enzyme (%)** | **Actual DH (%)** |
| 1 | 0 (4.00) | 0 (30.00) | 0 (1.00) | 86.34 |
| 2 | 0 (4.00) | 0 (30.00) | 0 (1.00) | 87.77 |
| 3 | -1 (3.50) | 0 (30.00) | +1 (1.50) | 75.66 |
| 4 | +1 (4.50) | -1 (25.00) | 0 (1.00) | 75.98 |
| 5 | 0 (4.00) | -1 (25.00) | +1 (1.50) | 78.10 |
| 6 | 0 (4.00) | +1 (35.00) | -1 (0.50) | 75.47 |
| 7 | -1 (3.50) | -1 (25.00) | 0 (1.00) | 78.69 |
| 8 | 0 (4.00) | 0 (30.00) | 0 (1.00) | 89.15 |
| 9 | 0 (4.00) | +1 (35.00) | +1 (1.50) | 76.99 |
| 10 | +1 (4.50) | 0 (30.00) | -1 (0.50) | 76.12 |
| 11 | +1 (4.50) | 0 (30.00) | +1 (1.50) | 76.68 |
| 12 | -1 (3.50) | +1 (35.00) | 0 (1.00) | 75.63 |
| 13 | 0 (4.00) | -1 (25.00) | -1 (0.50) | 78.78 |
| 14 | -1 (3.50) | 0 (30.00) | -1 (0.50) | 76.42 |
| 15 | +1 (4.50) | +1 (35.00) | 0 (1.00) | 73.00 |