|  |  |  |
| --- | --- | --- |
| **Factors** | **Parameters of regression analysis** | |
| **Gel strength** | **Insolubility ratio** |
| Model | 627.83 | 8600.50 |
| A-Water | 3.14 | 46.13 |
| B-sucrose | 13.30 | 307.52 |
| C-Gelatin | 587.36 | 749.84 |
| AB | 1.12 | 9.21 |
| AC | 0.9497 | 32.04 |
| BC | 0.0641 | 23.38 |
| A2 | 4.16 | 1.15 |
| B2 | 2.38 | 27.72 |
| C2 | 16.28 | 668.09 |
| **Analysis of variance** | | |
| R2 | 0.9956 | 0.9835 |
| Adjusted R2 | 0.9900 | 0.9622 |
| Predicted R2 | 0.9311 | 0.7439 |
| Adeq precision | 41.0479 | 21.1224 |
| Residual | 2.75 | - |
| Lack of fit | 2.71 | - |
| Pure error | 0.0319 | - |
| Cor total | 630.38 | - |

Supplementary File. 1. Parameters of regression analysis and analysis of variance of the

quadratic equation for the optimization of ingredients of bait matrix.

|  |  |  |  |
| --- | --- | --- | --- |
| **Factors** | **Parameters of regression analysis** | | |
| **Gel strength (N)** | **Insolubility ratio (%)** | **Melting point (°C)** |
| Intercept | 6.60 | 70.64 | 38.57 |
| A-Curing duration | -7.38 | -9.32 | -1.05 |
| B-Curing temperature | 2.93 | 3.05 | 1.38 |
| AB | -3.35 | -2.49 | -0.1750 |
| A2 | 2.31 | -4.50 | -2.53 |
| B2 | -0.6679 | -0.0069 | 0.4397 |
| **Analysis of variance** | | | |
| R2 | 0.9859 | 0.9571 | 0.9006 |
| Adj R2 | 0.9758 | 0.9265 | 0.8296 |
| Pred R2 | 0.8578 | 0.5669 | 0.1564 |
| Adeq. Precision | 33.3673 | 17.6198 | 11.9458 |
| Lack of fit P | <0.0001 | 0.0173 | 0.0566 |
| Lack of fit F | 8.29 | 7.65 | 6.10 |
| P value of the model | <0.0001 | 0.0001 | 0.0021 |

Supplementary File. 2. Parameters of regression analysis and Analysis of variance of the

Quadratic equations for the process parameters