TAREA 19. Se utilizó un diseño 25-1 para investigar los efectos de cinco factores sobre el color de un producto químico. Los factores son A = solvente/reactivo, B = catalizador/reactivo, C = temperatura, D = pureza de reactivo y E = PH del reactivo. Los resultados fueron como sigue:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Factor\_A | Factor\_B | Factor\_C | Factor\_D | Factor\_E | color del quimico |
| -1,0 | -1,0 | -1,0 | -1,0 | 1,0 | -0.63 |
| 1,0 | -1,0 | -1,0 | -1,0 | -1,0 | 2.51 |
| -1,0 | 1,0 | -1,0 | -1,0 | -1,0 | -2.68 |
| 1,0 | 1,0 | -1,0 | -1,0 | 1,0 | 1.66 |
| -1,0 | -1,0 | 1,0 | -1,0 | -1,0 | 2.06 |
| 1,0 | -1,0 | 1,0 | -1,0 | 1,0 | 1.22 |
| -1,0 | 1,0 | 1,0 | -1,0 | 1,0 | -2.09 |
| 1,0 | 1,0 | 1,0 | -1,0 | -1,0 | 1.93 |
| -1,0 | -1,0 | -1,0 | 1,0 | -1,0 | 6.79 |
| 1,0 | -1,0 | -1,0 | 1,0 | 1,0 | 5.47 |
| -1,0 | 1,0 | -1,0 | 1,0 | 1,0 | 3.45 |
| 1,0 | 1,0 | -1,0 | 1,0 | -1,0 | 5.68 |
| -1,0 | -1,0 | 1,0 | 1,0 | 1,0 | 5.22 |
| 1,0 | -1,0 | 1,0 | 1,0 | -1,0 | 4.38 |
| -1,0 | 1,0 | 1,0 | 1,0 | -1,0 | 4.3 |
| 1,0 | 1,0 | 1,0 | 1,0 | 1,0 | 4.05 |

Realiza el analisis estadistico de este diseño fraccion un medio y encuentra las recomendaciones para maximizar el color del producto quimico.