**Table S1:** Pseudoternary phase composition and thermodynamic stability tests

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Batches** | **Composition** | | | **Observations** | | | | | **Equilibration test** | | | | | **Centrifugation test** | | | | | **Heating cooling cycle** | | | | | **Freeze thaw cycle** | | | | |
| Oil | Water | Smix | 1:1 ratio | 1:2 ratio | 1:3 ratio | 3:1 ratio | 2:1 ratio | 1:1 ratio | 1:2 ratio | 1:3 ratio | 3:1 ratio | 2:1 ratio | 1:1 ratio | 1:2 ratio | 1:3 ratio | 3:1 ratio | 2:1 ratio | 1:1 ratio | 1:2 ratio | 1:3 ratio | 3:1 ratio | 2:1 ratio | 1:1 ratio | 1:2 ratio | 1:3 ratio | 3:1 ratio | 2:1 ratio |
| B-1 | 5 | 5 | 90 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-2 | 5 | 10 | 85 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-3 | 5 | 15 | 80 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-4 | 5 | 20 | 75 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-5 | 5 | 25 | 70 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-6 | 5 | 30 | 65 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-7 | 5 | 35 | 60 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-8 | 5 | 40 | 55 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-9 | 5 | 45 | 50 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-10 | 10 | 5 | 85 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-11 | 10 | 10 | 80 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-12 | 10 | 15 | 75 | 1 | 1 | 2 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-13 | 10 | 20 | 70 | 1 | 1 | 2 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-14 | 10 | 25 | 65 | 1 | 1 | 2 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-15 | 10 | 30 | 60 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-16 | 15 | 5 | 80 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-17 | 15 | 10 | 75 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-18 | 15 | 15 | 70 | 1 | 1 | 2 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-19 | 15 | 20 | 65 | 1 | 1 | 2 | 1 | 1 | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ |
| B-20 | 15 | 25 | 60 | 1 | 1 | 2 | 1 | 1 | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ |
| B-21 | 15 | 30 | 55 | 1 | 1 | 3 | 1 | 1 | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ |
| B-22 | 20 | 5 | 75 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-23 | 20 | 10 | 70 | 1 | 1 | 2 | 1 | 1 | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ |
| B-24 | 20 | 15 | 65 | 1 | 1 | 2 | 1 | 1 | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ |
| B-25 | 20 | 20 | 60 | 1 | 1 | 2 | 1 | 1 | X | √ | X | √ | √ | X | √ | X | √ | √ | X | √ | X | √ | √ | X | √ | X | √ | √ |
| B-26 | 20 | 25 | 55 | 1 | 1 | 2 | 1 | 1 | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ |
| B-27 | 20 | 30 | 50 | 1 | 3 | 3 | 1 | 1 | √ | X | X | √ | √ | √ | X | X | √ | √ | √ | X | X | √ | √ | √ | X | X | √ | √ |
| B-28 | 20 | 35 | 45 | 3 | 3 | 3 | 1 | 1 | X | X | X | √ | √ | X | X | X | √ | √ | X | X | X | √ | √ | X | X | X | √ | √ |
| B-29 | 30 | 5 | 65 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| B-30 | 30 | 10 | 60 | 1 | 1 | 1 | 1 | 3 | √ | √ | √ | X | X | √ | √ | √ | X | X | √ | √ | √ | X | X | √ | √ | √ | X | X |
| B-31 | 30 | 15 | 55 | 1 | 1 | 1 | 1 | 1 | √ | √ | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ |
| B-32 | 30 | 20 | 50 | 1 | 2 | 2 | 1 | 1 | √ | X | X | √ | √ | √ | X | X | √ | √ | √ | X | X | √ | √ | √ | X | X | √ | √ |
| B-33 | 30 | 25 | 45 | 3 | 3 | 3 | 1 | 1 | X | X | X | √ | √ | X | X | X | √ | √ | X | X | X | √ | √ | X | X | X | √ | √ |
| B-34 | 30 | 30 | 40 | 3 | 3 | 3 | 3 | 3 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| B-35 | 40 | 5 | 55 | 3 | 1 | 1 | 1 | 1 | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ | X | √ | √ | √ | √ |
| B-36 | 40 | 10 | 50 | 3 | 1 | 1 | 3 | 3 | X | √ | √ | X | X | X | √ | √ | X | X | X | √ | √ | X | X | X | √ | √ | X | X |
| B-37 | 40 | 15 | 45 | 1 | 3 | 2 | 3 | 1 | √ | X | X | √ | √ | √ | X | X | √ | √ | √ | X | X | √ | √ | √ | X | X | √ | √ |
| B-38 | 40 | 20 | 40 | 3 | 3 | 3 | 3 | 3 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| B-39 | 50 | 5 | 45 | 3 | 1 | 2 | 3 | 3 | X | √ | √ | X | √ | X | √ | √ | X | √ | X | √ | √ | X | √ | X | √ | √ | X | X |
| B-40 | 50 | 10 | 40 | 3 | 3 | 2 | 3 | 3 | X | X | X | √ | X | X | X | X | √ | X | X | X | X | √ | X | X | X | X | √ | X |
| B-41 | 50 | 15 | 35 | 3 | 3 | 3 | 3 | 3 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| B-42 | 50 | 20 | 30 | 3 | 3 | 3 | 3 | 3 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| B-43 | 60 | 5 | 35 | 3 | 3 | 3 | 3 | 3 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| B-44 | 60 | 10 | 30 | 3 | 3 | 3 | 3 | 3 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |