**Figure 1A**

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | Time (mins.) | Particle Size | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| A | IND | 1.20 | 12 | LAC | 8.80 | 88 | | | | | | | 30 | 0.223 | 45 | 61 | 71 | 77 | 89 | | |
| B | IND | 1.20 | 12 | LAC | 8.70 | 87 | SPS | 0.1 | 1 | | | | 30 | 0.215 | 47 | 64 | 84 | 83 | 93 | | |
| C | IND | 1.20 | 12 | LAC | 8.70 | 87 | SDS | 0.1 | 1 | | | | 30 | 0.189 | 53 | 73 | 88 | 95 | 99 | | |
| D | IND | 1.20 | 12 | LAC | 8.70 | 87 | SOS | 0.1 | 1 | | | | 30 | 0.203 | 49 | 69 | 84 | 92 | 97 | | |
| E | IND | 1.20 | 12 | LAC | 8.70 | 87 | B700 | 0.1 | 1 | | | | 30 | 0.167 | 60 | 80 | 93 | 97 | 99 | | |
| F | IND | 1.20 | 12 | LAC | 8.70 | 87 | B76 | 0.1 | 1 | | | | 30 | 0.192 | 52 | 72 | 89 | 96 | 99 | | |
| G | IND | 1.20 | 12 | LAC | 8.70 | 87 | SDC | 0.1 | 1 | | | | 30 | 0.191 | 52 | 67 | 77 | 83 | 93 | | |
| H | IND | 1.20 | 12 | LAC | 8.70 | 87 | SNS | 0.1 | 1 | | | | 30 | 0.225 | 44 | 63 | 79 | 88 | 96 | | |
| I | IND | 1.20 | 12 | LAC | 8.70 | 87 | LEC | 0.1 | 1 | | | | 30 | 0.230 | 44 | 61 | 75 | 85 | 95 | | |
| J | IND | 0.5 | 10 | LAC | 4.50 | 90 | | | | | | | 20 | 0.237 | 44 | 57 | 65 | 73 | 85 | | |
| K | IND | 0.5 | 10 | LAC | 4.45 | 89 | P40S | 0.05 | 1 | | | | 20 | 0.169 | 58 | 72 | 80 | 89 | 97 | | |
| L | IND | 0.5 | 10 | LAC | 4.45 | 89 | DS | 0.05 | 1 | | | | 20 | 0.249 | 42 | 56 | 68 | 84 | 98 | | |
| M | IND | 0.5 | 10 | LAC | 4.45 | 89 | AS | 0.05 | 1 | | | | 20 | 0.190 | 52 | 67 | 76 | 84 | 92 | | |
| N | IND | 1.0 | 20 | LAC | 3.95 | 79 | SDS | 0.05 | 1 | | | | 30 | 0.435 | 24 | 38 | 53 | 67 | 83 | | |
| O | IND | 1.0 | 20 | | | | SDS | 4.00 | 80 | | | | 30 | 2.612 | 0 | 0 | 0 | 6 | 34 | | |
| P | IND | 4.95 | 99 | | | | SDS | 0.05 | 1 | | | | 30 | 1094 | 0 | 0 | 0 | 0 | 2 | | |
| Q | IND | 1.0 | 20 | LAC | 4.00 | 80 | | | | | | | 30 | 5.128 | 0 | 0 | 0 | 0 | 8 | | |
| R | DIC | 1.0 | 20 | LAC | 3.95 | 79 | SDS | 0.05 | 1 | | | | 30 | 0.153 | 66 | 84 | 95 | 98 | 99 | | |
| S | DIC | 1.0 | 20 | | | | SDS | 4.00 | 80 | | | | 30 | 3.173 | 0 | 0 | 0 | 3 | 24 | | |

Figure 1B

| Sample No. | Active material | | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | Time (mins.) | Particle Size | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | |
| T | DIC | 4.95 | 99 | | | | | SDS | 0.05 | 1 | | | | 30 | 117 | 0 | 0 | 0 | 1 | 4 | |
| U | DIC | 1.00 | 20 | | LAC | 4.00 | 80 | | | | | | | 30 | 0.178 | 56 | 74 | 86 | 92 | 97 | |
| V | DIC | 2.00 | 20 | | MAN | 8.00 | 80 | | | | | | | 30 | 0.2 | 50 | 69 | 84 | 91 | 97 | |
| W | DIC | 2.00 | 20 | | MAN | 7.90 | 79 | SDS | 0.1 | 1 | | | | 30 | 0.201 | 50 | 69 | 83 | 91 | 97 | |
| X | DIC | 2.00 | 20 | | MAN | 7.90 | 79 | SOS | 0.1 | 1 | | | | 30 | 0.195 | 51 | 71 | 85 | 92 | 97 | |
| Y | NAA | 1.75 | 35 | | LAC | 3.2 | 65 | | | | | | | 20 | 2.9 | 18 | 23 | 25 | 26 | 38 | |
| Z | NAA | 1.75 | 35 | | LAC | 3.25 | 64 | P40S | 0.05 | 1 | | | | 20 | 0.373 | 33 | 45 | 56 | 70 | 87 | |
| AA | NAA | 1.75 | 35 | | LAC | 3.25 | 64 | SDS | 0.05 | 1 | | | | 20 | 0.293 | 38 | 50 | 60 | 65 | 75 | |
| AB | NAA | 4.0 | 40 | | LAC | 5.9 | 59 | P40S | 0.1 | 1 | | | | 120 | 0.285 | 37 | 52 | 66 | 75 | 82 | |
| AC | NAA | 4.0 | 40 | | LAC | 6.0 | 60 | | | | | | | 120 | 6.1 | 0 | 0 | 0 | 0 | 8 | |
| AD | NAA | 1.40 | 35 | | MAN | 2.60 | 65 | | | | | | | 20 | 0.171 | 58 | 73 | 82 | 86 | 88 | |
| AE | NAA | 1.40 | 35 | | MAN | 2.52 | 63 | SDS | 0.08 | 2 | | | | 20 | 0.131 | 76 | 90 | 95 | 96 | 98 | |
| AF | NAA | 1.2 | 30 | | MAN | 2.8 | 70 | | | | | | | 20 | 0.208 | 48 | 64 | 75 | 79 | 84 | |
| AG | NAA | 1.2 | 30 | | MAN | 2.76 | 69.0 | SDS | 0 | 1.0 | | | | 20 | 0.173 | 58 | 75 | 86 | 91 | 96 | |
| AH | NAA | 1.2 | 30.0 | | LAC | 2.8 | 70.0 | | | | | | | 20 | 0.396 | 33 | 44 | 53 | 58 | 70 | |
| AI | NAA | 1.2 | 30.0 | | TCD | 2.8 | 70.0 | | | | | | | 20 | 3.1 | 18 | 24 | 27 | 27 | 37 | |
| AJ | NAA | 1.2 | 30.0 | | CAC | 2.8 | 70.0 | | | | | | | 20 | 28 | 3 | 4 | 5 | 6 | 10 | |
| AK | NAA | 1 | 25.0 | | LAA | 3 | 75.0 | | | | | | | 20 | 1.07 | 31 | 41 | 46 | 49 | 67 | |
| AL | NAA | 1 | 25.0 | | XYL | 3 | 75.0 | | | | | | | 20 | 0.18 | 57 | 75 | 87 | 92 | 95 | |

**Figure 1C**

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | Time (mins.) | Particle Size | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | |
| AM | NAA | 1 | 25.0 | | MAA | 3 | 75.0 | | | | | | | 20 | 0.153 | 66 | 85 | 96 | 98 | 99 | | |
| AN | NAA | 1 | 25.0 | | TCD | 3 | 75.0 | | | | | | | 20 | 0.331 | 35 | 48 | 57 | 62 | 72 | | |
| AO | HAL | 1 | 10.0 | | LAC | 9 | 90.0 | | | | | | | 40 | 2.123 | 0 | 0 | 0 | 0 | 5 | | |
| AP | HAL | 1 | 10.0 | | LAC | 8.9 | 89.0 | LEC | 0.1 | 1.0 | | | | 40 | 0.135 | 74 | 90 | 97 | 98 | 99 | | |
| AQ | MET | 1 | 10.0 | | LAC | 9 | 90.0 | | | | | | | 40 | 4.727 | 0 | 0 | 0 | 0 | 4 | | |
| AR | MET | 1 | 10.0 | | LAC | 8.9 | 89.0 | SDS | 0.1 | 1.0 | | | | 40 | 0.129 | 80 | 93 | 96 | 97 | 98 | | |
| AS | TRI | 1 | 10.0 | | LAC | 9 | 90.0 | | | | | | | 40 | 2.622 | 0 | 0 | 0 | 0 | 25 | | |
| AT | TRI | 1 | 10.0 | | LAC | 8.9 | 89.0 | B700 | 0.1 | 1.0 | | | | 40 | 0.128 | 82 | 96 | 98 | 98 | 99 | | |
| AU | SUL | 1 | 10.0 | | LAC | 9 | 90.0 | | | | | | | 40 | 0.388 | 27 | 42 | 56 | 69 | 86 | | |
| AV | SUL | 1 | 10.0 | | LAC | 8.9 | 89.0 | SDS | 0.1 | 1.0 | | | | 40 | 0.455 | 6 | 26 | 55 | 78 | 96 | | |
| AW | MAN | 1 | 10.0 | | LAC | 9 | 90.0 | | | | | | | 40 | 0.198 | 50 | 71 | 88 | 97 | 97 | | |
| AX | MAN | 1 | 10.0 | | LAC | 8.9 | 89.0 | B700 | 0.1 | 1.0 | | | | 40 | 0.17 | 60 | 82 | 96 | 100 | 100 | | |
| AY | MAN | 1 | 10.0 | | LAC | 8.9 | 89.0 | SDS | 0.1 | 1.0 | | | | 40 | 0.171 | 60 | 82 | 97 | 100 | 100 | | |
| AZ | MAN | 1 | 10.0 | | LAC | 8.9 | 89.0 | LEC | 0.1 | 1.0 | | | | 40 | 0.181 | 56 | 78 | 95 | 100 | 100 | | |
| BA | MAN | 2 | 20.0 | | LAC | 7.9 | 79.0 | SDS | 0.1 | 1.0 | | | | 40 | 0.212 | 47 | 68 | 86 | 96 | 98 | | |
| BB | MAN | 3 | 30.0 | | LAC | 6.9 | 69.0 | SDS | 0.1 | 1.0 | | | | 40 | 0.258 | 36 | 58 | 81 | 94 | 97 | | |
| BC | MTX | 1.5 | 30.0 | | LAC | 3.5 | 69.0 | P407 | 0.1 | 1.0 | | | | 60 | 0.16 | 63 | 77 | 84 | 89 | 93 | | 2 |
| BD | MTX | 1.5 | 30.0 | | LAC | 3.5 | 70.0 | | | | | | | 60 | 0.28 | 40 | 52 | 59 | 59 | 71 | | 2 |
| BE | MTX | 2.5 | 50.0 | | LAC | 2.35 | 47.0 | SDS | 0.8 | 2.0 | P407 | 0.1 | 2 | 60 | 0.148 | 67 | 83 | 92 | 98 | 99 | | 2 |

**Figure 1D**

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | Time (mins.) | Particle Size | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| BF | NAA | 1 | 25 | 30 | MAN | 3 | 75 | | | | | | | 20 | 0.181 | 55 | 74 | 87 | 94 | 97 | | |
| BG | NAA | 1 | 25 | 30 | XYL | 3 | 75 | | | | | | | 20 | 0.177 | 56 | 74 | 85 | 91 | 95 | | |
| BH | NAS | 1.25 | 25 | 30 | TA | 3.75 | 75 | | | | | | | 20 | 0.311 | 37 | 49 | 59 | 64 | 75 | | |
| BI | NAS | 1.25 | 25 | 30 | TA | 3.75 | 74 | P40S | 0.1 | 1 | | | | 30 | 0.303 | 36 | 50 | 62 | 77 | 89 | | |
| BJ | DIC | 3 | 30 | 31 | LAC | 6.9 | 69 | SDS | 0.1 | 1 | | | | 90 | 0.202 | 49 | 69 | 83 | 88 | 92 | | |
| BK | 2,4D | 1 | 20 | | LAC | 4 | 80 | | | | | | | 30 | 1.205 | 17 | 23 | 29 | 43 | 72 | 93 | 1 |
| BL | 2,4D | 1 | 20 | | LAC | 3.95 | 79 | SDA | 0.05 | 1 | | | | 30 | 0.473 | 20 | 33 | 52 | 75 | 82 | 91 | 1 |
| BM | 2,4D | 1 | 20 | | LAC | 3.95 | 79 | T3785 | 0.05 | 1 | | | | 30 | 0.414 | 24 | 38 | 57 | 78 | 94 | 93 | 1 |
| BN | 2,4D | 1 | 20 | | LAC | 3.95 | 79 | D920 | 0.05 | 1 | | | | 30 | 0.402 | 26 | 40 | 57 | 78 | 91 | 93 | 1 |
| BO | 2,4D | 1 | 20 | | LAC | 3.95 | 79 | SDS | 0.05 | 1 | | | | 30 | 0.276 | 36 | 54 | 74 | 92 | 96 | | 1 |
| BP | 2,4D | 1 | 20 | | LAC | 3.95 | 79 | B700 | 0.05 | 1 | | | | 30 | 0.269 | 38 | 54 | 69 | 86 | 95 | 92 | 1 |
| BQ | 2,4D | 1 | 20 | | LAC | 3.95 | 79 | K1251 | 0.05 | 1 | | | | 30 | 0.252 | 41 | 56 | 71 | 89 | 96 | 91 | 1 |
| BR | 2,4D | 1 | 20 | | LAC | 3.95 | 79 | T305 | 0.05 | 1 | | | | 30 | 0.231 | 44 | 59 | 73 | 87 | 96 | 94 | 1 |
| BS | GLY | 1 | 20 | | LAC | 3.95 | 79 | T2700 | 0.05 | 1 | | | | 30 | 0.976 | 25 | 35 | 43 | 50 | 64 | 59 | 4 |
| BT | GLY | 1 | 20 | | LAC | 3.95 | 79 | B700 | 0.05 | 1 | | | | 30 | 1.449 | 21 | 27 | 33 | 42 | 57 | 84 | 4 |
| BU | GLY | 1 | 20 | | LAC | 3.9 | 78 | B700 | 0.05 | 1 | T2700 | 0.05 | 1 | 30 | 0.311 | 37 | 49 | 58 | 66 | 79 | 81 | 4 |
| BV | GLY | 1 | 20 | | LAC | 3.9 | 78 | B700 | 0.05 | 1 | K1251 | 0.05 | 1 | 30 | 1.085 | 26 | 34 | 41 | 49 | 66 | 82 | 4 |
| BW | GLY | 1 | 20 | | LAC | 3.9 | 78 | B700 | 0.05 | 1 | P188 | 0.05 | 1 | 30 | 1.48 | 8 | 11 | 16 | 33 | 62 | 86 | 4 |
| BX | GLY | 1 | 20 | | LAC | 3.9 | 78 | B700 | 0.05 | 1 | T2700 | 0.05 | 1 | 60 | 0.176 | 57 | 74 | 86 | 94 | 96 | 79 | 4 |

**Figure 1E**

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | Time (mins.) | Particle Size | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| BY | GLY | 1 | 20 | | LAC | 3.9 | 78 | B700 | 0.05 | 1 | K1251 | 0.05 | 1 | 60 | 0.658 | 0 | 0 | 21 | 93 | 100 | 81 | 4 |
| BZ | GLY | 1 | 20 | | LAC | 3.9 | 78 | B700 | 0.05 | 1 | T2700 | 0.05 | 1 | 60 | 0.159 | 63 | 78 | 88 | 94 | 95 | 79 | 4 |
| CA | GLY | 1 | 20 | | LAC | 3.9 | 78 | B700 | 0.05 | 1 | K1251 | 0.05 | 1 | 60 | 0.297 | 34 | 50 | 70 | 95 | 100 | 81 | 4 |
| CB | MEL | 0.5 | 10 | | LAC | 4.4 | 88 | CEL | 0.1 | 2 | | | | 25 | 1.128 | 31 | 39 | 42 | 48 | 68 | 68 | 1 |
| CC | MEL | 0.5 | 10 | | LAC | 4.3 | 87 | P188 | 0.2 | 3 | BC | 0 | 0 | 25 | 0.27 | 38 | 53 | 59 | 62 | 81 | 73 | 1 |
| CD | MEL | 0.5 | 10 | | LAC | 4.3 | 87 | P188 | 0.2 | 3 | CEL | 0 | 1 | 25 | 0.278 | 40 | 52 | 58 | 62 | 76 | 74 | 1 |
| CE | MEL | 0.5 | 10 | | LAC | 4.3 | 87 | P188 | 0.2 | 3 | DS | 0 | 1 | 25 | 0.12 | 82 | 96 | 100 | 100 | 100 | 88 | 1 |
| CF | MEL | 0.5 | 10 | | LAC | 4.4 | 89 | P188 | 0.1 | 1 | K25 | 0 | 1 | 25 | 0.249 | 42 | 55 | 59 | 61 | 74 | 69 | 1 |
| CG | MEL | 0.25 | 5 | | MAN | 4.6 | 92 | P188 | 0.2 | 3 | LEC | 0.02 | 0.5 | 25 | 0.123 | 81 | 96 | 100 | 100 | 100 | 58 | 1 |
| CH | MEL | 0.5 | 10 | | LAC | 4.3 | 87 | P188 | 0.2 | 3 | LEC | 0.02 | 0.5 | 25 | 0.144 | 71 | 88 | 94 | 94 | 97 | 68 | 1 |
| CI | MEL | 0.5 | 10 | | LAC | 4.3 | 87 | P188 | 0.2 | 3 | SDC | 0.02 | 0.5 | 25 | 0.184 | 54 | 70 | 79 | 81 | 87 | 63 | 1 |
| CJ | MEL | 0.5 | 10 | | LAC | 4.3 | 87 | P188 | 0.2 | 3 | T80 | 0 | 1 | 25 | 0.224 | 45 | 61 | 70 | 75 | 87 | 68 | 1 |
| CK | MEL | 0.25 | 5 | | LAC | 4.7 | 94 | P188 | 0.1 | 1 | | | | 25 | 0.158 | 63 | 81 | 90 | 90 | 93 | 48 | 1 |
| CL | MEL | 0.5 | 10 | | LAC | 4.4 | 87 | P188 | 0.2 | 3 | | | | 25 | 0.169 | 59 | 76 | 85 | 87 | 93 | 58 | 1 |
| CM | MEL | 0.25 | 5 | | LAC | 4.6 | 92 | P188 | 0.2 | 3 | | | | 25 | 0.221 | 46 | 60 | 68 | 69 | 75 | 68 | 1 |
| CN | MEL | 0.5 | 10 | | LAC | 4.3 | 85 | P188 | 0.3 | 5 | | | | 25 | 0.309 | 39 | 49 | 55 | 56 | 66 | 74 | 1 |
| CO | MEL | 0.5 | 9.5 | | MAN | 4.6 | 88 | P188 | 0.2 | 3 | | | | 25 | 0.251 | 43 | 55 | 61 | 62 | 68 | 55 | 1 |
| CP | MEL | 0.5 | 10 | | MAN | 4.5 | 89 | P3000 | 0.1 | 1 | | | | 25 | 1.343 | 29 | 36 | 39 | 43 | 63 | 61 | 1 |
| CQ | MEL | 0.5 | 10 | | MAN | 4.5 | 89 | SDC | 0.1 | 1 | | | | 25 | 1.699 | 25 | 31 | 32 | 37 | 56 | 77 | 1 |

Figure 1F

| Sample No. | Active material | | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | Time (mins.) | Particle Size | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| CR | MEL | 0.5 | 10 | | LAC | 4.4 | 88 | T80 | 0.1 | 2 | | | | 25 | 1.279 | 28 | 35 | 38 | 44 | 65 | 68 | 1 |
| CS | MAN | 2.5 | 50 | 45 | LAC | 2.35 | 47 | SDS | 0.15 | 3 | | | | 15 | 0.318 | 31 | 48 | 65 | 80 | 84 | | 5 |
| CT | MAN | 2.5 | 50 | 45 | LAC | 2.45 | 49 | P188 | 0.05 | 1 | | | | 15 | 0.33 | 30 | 46 | 64 | 77 | 82 | | 5 |
| CU | MAN | 2.5 | 50 | 45 | LAC | 2.45 | 49 | P40S | 0.05 | 1 | | | | 15 | 0.333 | 30 | 46 | 63 | 75 | 80 | | 5 |
| CV | MAN | 2.5 | 50 | 45 | LAC | 2.45 | 49 | B700 | 0.05 | 1 | | | | 15 | 0.337 | 29 | 46 | 63 | 76 | 81 | | 5 |
| CW | MAN | 2.5 | 50 | 45 | LAC | 2.45 | 49 | P407 | 0.05 | 1 | | | | 15 | 0.342 | 28 | 45 | 63 | 76 | 82 | | 5 |
| CX | MAN | 2.5 | 50 | 45 | LAC | 2.45 | 49 | T1221 | 0.05 | 1 | | | | 15 | 0.411 | 24 | 40 | 56 | 69 | 75 | | 5 |
| CY | MAN | 2.5 | 50 | 45 | LAC | 2.45 | 49 | DS | 0.05 | 1 | | | | 15 | 0.462 | 22 | 37 | 52 | 65 | 71 | | 5 |
| CZ | MAN | 2.5 | 50 | 45 | LAC | 2.45 | 49 | SDS | 0.05 | 1 | | | | 15 | 1.369 | 1 | 6 | 20 | 43 | 56 | | 5 |
| DA | MAN | 2.5 | 50 | 45 | LAC | 2.45 | 49 | SDA | 0.05 | 1 | | | | 15 | 1.766 | 0 | 2 | 14 | 38 | 52 | | 5 |
| DB | MAN | 2.5 | 50 | 45 | LAC | 2.45 | 49 | CEL | 0.05 | 1 | | | | 15 | 1.86 | 0 | 2 | 14 | 37 | 51 | | 5 |
| DC | MAN | 2.5 | 50 | 45 | LAC | 2.5 | 50 | | | | | | | 15 | 2.578 | 0 | 1 | 11 | 31 | 45 | | 5 |
| DD | CEL | 0.5 | 10 | | LAC | 4.3 | 86 | SDS | 0.1 | 2 | P40S | 0.1 | 2 | 15 | 0.134 | 76 | 88 | 91 | 91 | 93 | 88 | 1 |
| DE | CEL | 0.5 | 10 | | LAC | 4.3 | 86 | SDS | 0.1 | 2 | P407 | 0.1 | 2 | 15 | 0.14 | 75 | 83 | 83 | 83 | 86 | 90 | 1 |
| DF | CEL | 0.5 | 10 | | LAC | 4.3 | 86 | SDS | 0.1 | 1 | LEC | 0.15 | 3 | 15 | 0.181 | 55 | 70 | 79 | 83 | 89 | 90 | 1 |
| DG | CEL | 0.5 | 10 | | LAC | 4.3 | 86 | SDS | 0.1 | 1 | B700 | 0.15 | 3 | 15 | 1.903 | 28 | 37 | 44 | 46 | 51 | 90 | 1 |
| DH | CEL | 0.5 | 10 | | LAC | 4.5 | 90 | | | | | | | 15 | 5.296 | 8 | 11 | 13 | 13 | 16 | 85 | 1 |
| DI | CEL | 0.5 | 10 | | LAC | 4.3 | 86 | SDS | 0.1 | 1 | P3000 | 0.15 | 3 | 15 | 0.397 | 33 | 45 | 53 | 59 | 71 | 88 | 1 |
| DJ | CEL | 0.5 | 10 | | LAC | 4.4 | 88 | SDS | 0.1 | 1 | P8000 | 0.05 | 1 | 15 | 0.234 | 44 | 58 | 69 | 77 | 87 | 87 | 1 |

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | Time (mins.) | Particle Size | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| DK | CEL | 0.5 | 10 | | LAC | 4.3 | 86 | DS | 0.1 | 2 | P40S | 0.1 | 2 | 15 | 0.319 | 35 | 48 | 61 | 69 | 74 | 88 | 1 |
| DL | CEL | 0.5 | 10 | | SOR | 4.5 | 90 | | | | | | | 15 | 16.031 | 0 | 0 | 0 | 0 | 0.8 | 46 | 1 |
| DM | CEL | 0.5 | 10 | | SOR | 4.45 | 89 | SDS | 0.1 | 1 | | | | 15 | 0.173 | 57 | 72 | 79 | 80 | 86 | 52 | 1 |
| DN | CYA | 0.5 | 10 | | LAC | 4.45 | 89 | SDS | 0.1 | 1 | | | | 20 | 0.159 | 65 | 84 | 95 | 100 | 100 | 79 | 5 |
| DO | CYA | 0.5 | 10 | | MAN | 4.45 | 89 | SDS | 0.1 | 1 | | | | 20 | 0.194 | 52 | 68 | 79 | 84 | 84 | 87 | 5 |
| DP | PRO | 0.5 | 10 | | LAC | 4.45 | 89 | SDS | 0.1 | 1 | | | | 20 | 0.229 | 43 | 63 | 83 | 97 | 98 | 87 | 5 |
| DQ | PRO | 0.5 | 10 | | MAN | 4.45 | 89 | SDS | 0.1 | 1 | | | | 20 | 0.553 | 15 | 27 | 45 | 77 | 94 | 89 | 5 |
| DR | PRO | 0.5 | 10 | | LAC | 4.45 | 89 | C40 | 0.1 | 1 | | | | 20 | 0.546 | 10 | 23 | 45 | 76 | 89 | 72 | 5 |
| DS | SAL | 0.51 | 10 | | LAC | 4.5 | 89.5 | LEC | 0.05 | 1 | | | | 20 | 0.128 | 84 | 98 | 100 | 100 | 100 | | |
| DT | SAL | 0.51 | 10 | | LAC | 4.5 | 89.5 | LEC | 0.05 | 1 | | | | 20 | 0.42 | 31 | 42 | 53 | 57 | 57 | | |
| DU | CIP | 0.76 | 15 | | MAL | 4.1 | 83 | T80 | 0.05 | 1 | DS | | | 20 | 0.22 | 40 | 74 | 85 | 85 | 92 | 96 | 6 |
| DV | CIP | 0.76 | 15 | | LAC | 4.2 | 85 | | | | | | | 20 | 25.909 | 1 | 2 | 3.1 | 4.8 | 7 | 89 | 6 |
| DW | CIP | 0.76 | 15 | | MAL | 4.3 | 85 | | | | | | | 20 | 0.238 | 43 | 56 | 58 | 58 | 61 | 93 | 6 |
| DX | CIP | 0.75 | 15 | | LAA | 4.3 | 85 | | | | | | | 20 | 0.205 | 49 | 62 | 65 | 65 | 71 | 97 | 6 |
| DY | CIP | 0.75 | 15 | | LAA | 4.2 | 84 | T80 | 0.06 | 1 | | | | 20 | 0.14 | 75 | 91 | 94 | 94 | 96 | 96 | 6 |
| DZ | CIP | 0.75 | 15 | | LAA | 4.2 | 84 | SOL | 0.05 | 1 | | | | 20 | 0.237 | 35 | 66 | 78 | 78 | 84 | 97 | 6 |
| EA | CIP | 0.75 | 15 | | LAA | 4.2 | 84 | CEL | 0.06 | 1 | | | | 20 | 0.23 | 37 | 69 | 81 | 81 | 87 | 87 | 6 |
| EB | CIP | 0.75 | 15 | | LAA | 4.2 | 84 | DS | 0.05 | 1 | | | | 20 | 0.216 | 42 | 74 | 83 | 83 | 91 | 96 | 6 |
| EC | CIP | 0.75 | 15 | | LAA | 4.2 | 84 | P8000 | 0.05 | 1 | | | | 20 | 0.243 | 33 | 64 | 75 | 75 | 82 | 97 | 6 |

Figure 1G

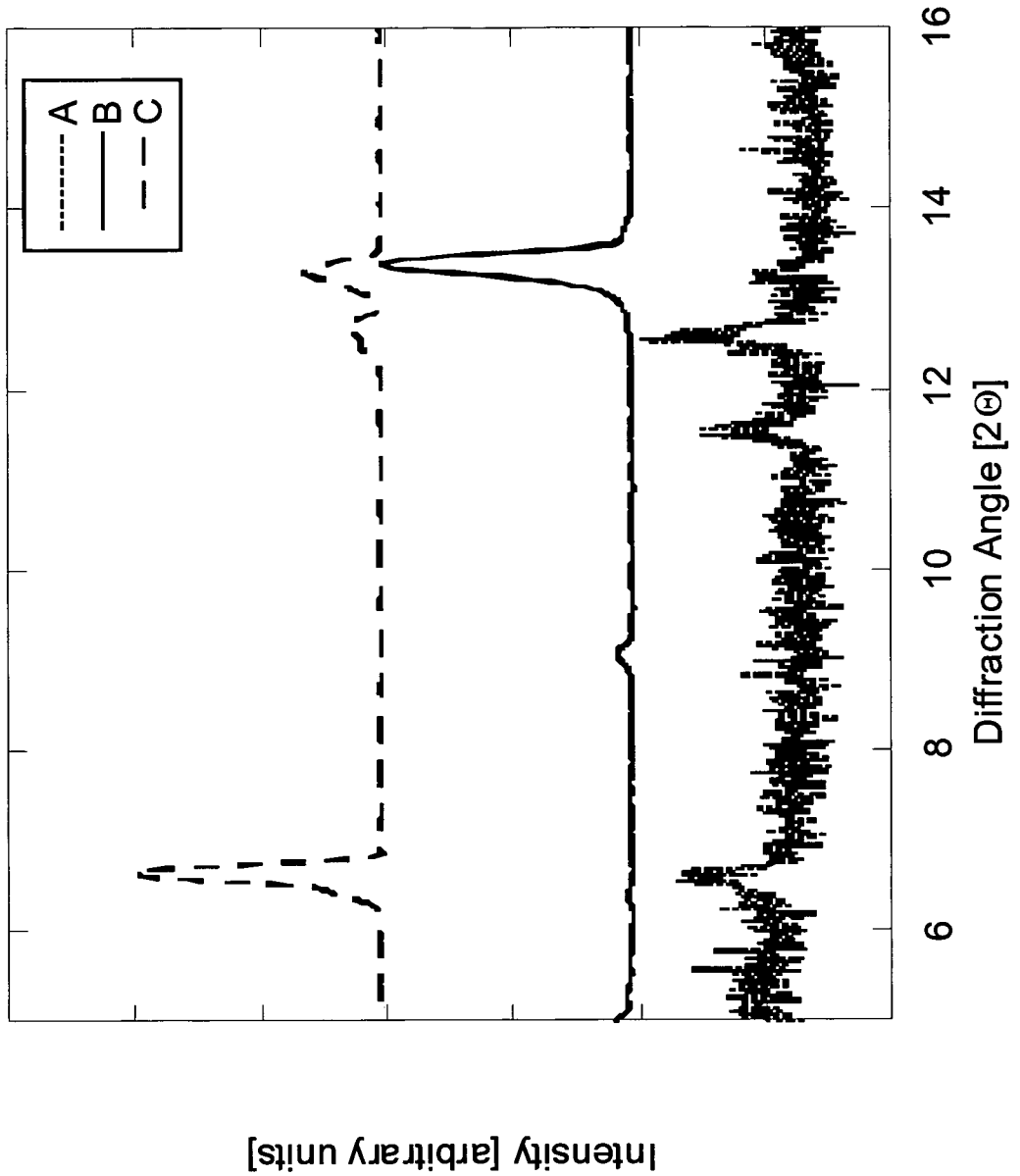
A
B
C
6
8
10
12
14
16
Diffraction Angle [2Θ]
Intensity [arbitrary units]

Figure 1H

| Sample No. | Active material | | | | Primary Matrix | | | | Surfactant #1 | | | | Time (mins.) | Particle Size | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | | Name | Mass (g) | % w/w | | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| A | IND | 1.20 | 12 | | LAC | 8.80 | 88 | | | | | | 30 | 0.753 | 25 | 34 | 44 | 55 | 70 | | |
| B | IND | 1.20 | 12 | | LAC | 8.70 | 87 | | SDS | 0.1 | 1 | | 30 | 0.677 | 14 | 26 | 41 | 65 | 91 | | |
| C | IND | 1.20 | 12 | | LAC | 8.70 | 87 | | B700 | 0.1 | 1 | | 30 | 0.621 | 13 | 25 | 43 | 68 | 91 | | |
| D | MEL | 1.2 | 20.0 | | MAN | 4.62 | 77 | | SDS | 0.18 | 3.0 | | 10 | 0.277 | 37 | 53 | 66 | 74 | 86 | 83 | |
| E | MEL | 1.2 | 20.0 | | MAN | 4.8 | 80 | | | | | | 15 | 2.493 | 10 | 12 | 12 | 15 | 39 | 33 | |
| F | DIC | 3 | 30 | 30 | MAN | 6.7 | 67 | | SDS | 0.3 | 3 | | 90 | 0.157 | 63 | 79 | 86 | 88 | 93 | | |

Figure 2A

| Sample No. | Active material | | | Primary Matrix | | | 2nd Matrix | | | Time (mins.) | Particle Size | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| A | NAA | 1.2 | 30.0 | LAC | 2 | 50.0 | TCD | 0.8 | 20.0 | 20 | 0.188 | 48 | 64 | 75 | 81 | 92 | | |
| B | NAA | 1.2 | 30.0 | LAC | 2 | 50.0 | CAC | 0.8 | 20.0 | 20 | 0.213 | 47 | 63 | 76 | 84 | 91 | | |
| C | NAA | 1 | 25.0 | LAA | 2.2 | 55.0 | XYL | 0.8 | 20.0 | 20 | 0.2 | 50 | 65 | 75 | 79 | 89 | | |
| D | NAA | 1 | 25.0 | LAA | 2.2 | 55.0 | MAA | 0.8 | 20.0 | 20 | 0.223 | 46 | 60 | 70 | 76 | 87 | | |
| E | NAA | 1 | 25.0 | LAA | 2.2 | 55.0 | TCD | 0.8 | 20.0 | 20 | 0.215 | 47 | 62 | 70 | 73 | 83 | | |

Figure 3A

**Figure 4A**

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | 2nd Matrix | | | Time (mins.) | Particle Size | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| A | MEL | 20 | 20.0 | LAC | 77 | 77.0 | SDS | 3 | 3.0 | | | | 15 | 0.24 | 39 | 64 | 87 | 97 | 100 | 90 | |
| B | MEL | 20 | 20.0 | LAC | 80 | 80.0 | | | | | | | 15 | 0.166 | 59 | 74 | 82 | 87 | 90 | 0.7 | |
| C | IND | 13 | 13.0 | LAC | 87 | 87.0 | | | | | | | 30 | 3.255 | 0 | 0 | 0 | 4 | 27 | 1 | |
| D | IND | 13 | 13.0 | LAC | 65.5 | 65.5 | | | | TA | 22 | 21.5 | 30 | 0.272 | 34 | 55 | 76 | 87 | 93 | 0 | |
| E | IND | 13 | 13.0 | LAC | 86 | 86.0 | SDS | 1 | 1.0 | | | | 30 | 0.836 | 22 | 31 | 39 | 56 | 83 | 76 | |
| F | IND | 13 | 13.0 | LAC | 64.5 | 64.5 | SDS | 1 | 1.0 | TA | 22 | 21.5 | 30 | 0.629 | 15 | 28 | 43 | 67 | 91 | 85 | |
| G | MEL | 25 | 25 | LAC | 72 | 72 | SDS | 3 | 3 | | | | 15 | 0.283 | 33 | 53 | 73 | 84 | 92 | | |

**Figure 5A**

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | Time (mins.) | Particle Size | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| A | NAA | 17.5 | 35.0 | MAN | 32 | 64.0 | SDS | 0.5 | 1.0 | | | | 80 | 0.249 | 42 | 56 | 64 | 67 | 74 | | |
| B | NAA | 17.5 | 35.0 | MAN | 31.5 | 63.0 | SDS | 0.5 | 1.0 | P40S | 0.5 | 1 | 80 | 0.261 | 39 | 55 | 67 | 77 | 88 | | |
| C | NAA | 17.5 | 35.0 | MAN | 31.5 | 63.0 | SDS | 0.5 | 1.0 | P3000 | 0.5 | 1 | 80 | 0.188 | 53 | 70 | 81 | 88 | 95 | | |
| D | IND | 6 | 12.0 | LAC | 43.5 | 87.0 | SDS | 0.5 | 1.0 | | | | 40 | 0.231 | 43 | 61 | 78 | 91 | 97 | | |
| E | IND | 6 | 12.0 | LAC | 43 | 86.0 | SDS | 0.5 | 1.0 | P407 | 0.5 | 1 | 40 | 0.152 | 66 | 85 | 95 | 97 | 98 | | |
| F | IND | 6 | 12.0 | LAC | 43 | 86.0 | SDS | 0.5 | 1.0 | P40S | 0.5 | 1 | 40 | 0.155 | 65 | 85 | 96 | 98 | 98 | | |

**Figure 6A**

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | 2nd Matrix | | | Time (mins.) | Particle Size | | | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | No. Ave. nm | | |
| A | NAA | 70 | 35 | | LAC | 128 | 64 | SDS | 2 | 1 | | | | | | | 60 | 0.345 | 35 | 47 | 56 | 61 | 73 | | 98 | O |
| B | NAA | 70 | 35 | | MAN | 128 | 64 | SDS | 2 | 1 | | | | | | | 50 | 0.73 | 31 | 41 | 48 | 51 | 58 | | | C |
| C | NAA | 60 | 30.0 | | MAN | 138 | 69.0 | SDS | 2 | 1.0 | | | | | | | 50 | 0.181 | 55 | 73 | 86 | 92 | 96 | | 92 | C |
| D | NAA | 60 | 30.3 | | MAN | 138 | 69.7 | | | | | | | | | | 50 | 0.319 | 35 | 48 | 59 | 64 | 75 | | 23 | C |
| E | DIC | 52.5 | 15.0 | | LAC | 294 | 84.0 | SDS | 3.5 | 1.0 | | | | | | | 40 | 0.16 | 64 | 84 | 97 | 99 | 99 | | 64 | E |
| F | DIC | 52.5 | 13.0 | | LAC | 224 | 66.0 | SDS | 3.5 | 1.0 | | | | TA | 70 | 20 | 40 | 0.16 | 63 | 83 | 95 | 98 | 99 | | 87 | E |
| G | NAA | 60 | 30 | 35 | LAC | 138 | 69 | SDS | 2 | 1 | | | | | | | 40 | 0.232 | 44 | 59 | 70 | 78 | 90 | | 79 | E |
| H | 2,4D | 40 | 20 | | LAC | 160 | 80 | | | | | | | | | | 30 | 0.212 | 47 | 69 | 90 | 100 | 100 | | 95 | |
| I | 2,4D | 40 | 20 | | LAC | 158 | 79 | SDA | 2 | 1 | | | | | | | 30 | 0.189 | 53 | 72 | 87 | 95 | 97 | | 97 | |
| J | 2,4D | 40 | 20 | | LAC | 158 | 79 | K1251 | 2 | 1 | | | | | | | 30 | 0.2 | 50 | 71 | 89 | 97 | 97 | | 97 | |
| K | 2,4D | 40 | 20 | | LAC | 158 | 79 | D920 | 2 | 1 | | | | | | | 30 | 0.204 | 49 | 69 | 86 | 94 | 97 | | 94 | |
| L | 2,4D | 60 | 20 | | LAC | 234 | 78 | SDA | 3 | 1 | PVP | 3 | 1 | | | | 30 | 0.281 | 30 | 54 | 82 | 96 | 96 | | 93 | |
| M | 2,4D | 60 | 20 | | LAC | 234 | 78 | D920 | 4 | 1 | PVP | 3 | 1 | | | | 40 | 0.183 | 55 | 75 | 91 | 98 | 98 | | 90 | |
| N | 2,4D | 60 | 20 | | LAC | 234 | 78 | K1251 | 3 | 1 | PVP | 3 | 1 | | | | 40 | 0.208 | 48 | 68 | 88 | 99 | 100 | | 92 | |
| O | GLY | 40 | 20 | | LAC | 158 | 79 | B700 | 2 | 1 | | | | | | | 90 | 0.297 | 38 | 50 | 61 | 74 | 87 | | 18 | |
| P | GLY | 40 | 20 | | LAC | 156 | 78 | B700 | 2 | 1 | T2700 | 2 | 1 | | | | 45 | 0.188 | 53 | 71 | 85 | 93 | 96 | | 79 | D |
| Q | GLY | 60 | 20 | | LAC | 234 | 78 | B700 | 3 | 1 | T2700 | 3 | 1 | | | | 30 | 4.798 | 0 | 0 | 0 | 0.2 | 9.9 | | | D |
| R | GLY | 60 | 20 | | LAC | 234 | 78 | B700 | 3 | 1 | T2700 | 3 | 1 | | | | 50 | 0.204 | 49 | 66 | 79 | 89 | 94 | | | D |

**Figure 6B**

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | 2nd | | | Time (mins.) | Particle Size | | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | No. Ave. nm | | |
| S | GLY | 60 | 20 | | LAC | 234 | 78 | B700 | 3 | 1 | T2700 | 3 | 1 | | | | 70 | 0.17 | 58 | 75 | 88 | 95 | 97 | | 94.7 | D |
| T | MEL | 35 | 10 | | LAC | 311.5 | 89 | LEC | 3.5 | 1 | | | | | | | 40 | 0.127 | 80 | 94 | 98 | 98 | 99 | | 81 | |
| U | MEL | 35 | 10 | | MAN | 311.5 | 89 | LEC | 3.5 | 1 | | | | | | | 20 | 0.199 | 50 | 67 | 76 | 82 | 91 | | 59 | 1 |
| V | MEL | 35 | 10 | | LAC | 309.8 | 89 | P188 | 3.5 | 1 | DS | 1.77 | 1 | | | | 20 | 0.13 | 77 | 94 | 100 | 100 | 100 | | 90 | 1 |
| W | MEL | 17.5 | 5 | | MAN | 323.8 | 93 | P188 | 7 | 2 | LEC | 1.75 | 0.5 | | | | 25 | 0.124 | 80 | 96 | 100 | 100 | 100 | | 67 | 1 |
| X | MEL | 17.5 | 5 | | LAC | 320.3 | 92 | P188 | 10.5 | 3 | LEC | 1.75 | 0.5 | | | | 40 | 0.129 | 78 | 94 | 99 | 99 | 99 | | 94 | 1 |
| Y | MEL | 17.5 | 5 | | MAN | 320.3 | 92 | P188 | 10.5 | 3 | LEC | 1.75 | 0.5 | | | | 25 | 0.14 | 72 | 88 | 93 | 94 | 98 | | 97 | 1 |
| Z | MEL | 35 | 10 | | LAC | 302.8 | 87 | P188 | 10.5 | 3 | LEC | 1.75 | 0.5 | | | | 30 | 0.168 | 59 | 75 | 83 | 87 | 94 | | 52 | 1 |
| AA | MEL | 35 | 10 | | LAC | 311.5 | 89 | P188 | 3.5 | 1 | | | | | | | 40 | 0.118 | 87 | 99 | 100 | 100 | 100 | | 87 | 1 |
| AB | MEL | 35 | 10 | | MAN | 311.5 | 89 | P188 | 3.5 | 1 | | | | | | | 30 | 0.164 | 60 | 77 | 87 | 93 | 97 | | 32 | 1 |
| AC | MEL | 35 | 10 | | LAC | 315.0 | 90 | | | | | | | | | | 20 | 0.143 | 71 | 89 | 95 | 96 | 98 | | 79 | 1 |
| AD | MEL | 35 | 10 | | MAN | 315.0 | 90 | | | | | | | | | | 25 | 0.26 | 39 | 55 | 66 | 73 | 85 | | 56 | 1 |
| AE | CRM | 60 | 20 | | LAC | 138 | 69 | LEC | 1 | 2 | | | | | | | 60 | 0.152 | 64 | 78 | 84 | 87 | 89 | | 79 | 7 |
| AF | CIL | 30 | 10 | | LAC | 267 | 89 | SDS | 3 | 1 | | | | | | | 20 | 0.162 | 64 | 86 | 99 | 100 | 100 | | 84 | 5,D |
| AG | PRO | 30 | 10 | | LAC | 267 | 89 | SDS | 3 | 1 | | | | | | | 30 | 0.62 | 12 | 24 | 42 | 67 | 89 | | 74 | 5,D |
| AH | PRO | 30 | 10 | | LAC | 270 | 90 | | | | | | | | | | 30 | 0.91 | 9 | 18 | 33 | 52 | 61 | | 66 | 5,D |
| AI | CIP | 30.0 | 15 | | LAA | 168.0 | 84 | T80 | 2.00 | 1 | | | | | | | 20 | 0.139 | 76 | 91 | 94 | 94 | 95 | 88 | 94 | E |
| AJ | CIP | 30.1 | 15 | | LAA | 170.0 | 85 | | | | | | | | | | 20 | 0.171 | 60 | 75 | 79 | 79 | 82 | | 36.7 | E |
| AK | CIP | 30.0 | 15 | | LAA | 168.0 | 84 | CEL | 2.00 | 1 | | | | | | | 20 | 0.277 | 41 | 51 | 54 | 54 | 56 | | 72 | E |

| Sample No. | Active material | | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | 2nd | | | Time (mins.) | Particle Size | | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | No. Ave. nm | | |
| AL | GLY | 60.0 | 20 | | LAC | 240.0 | 80 | | | | | | | | | | 70 | 50.4 | 0 | 0 | 0 | 0 | 4.4 | 1282 | 26 | 3,P |
| AM | CEL | 20.0 | 10 | | LAC | 176.1 | 88 | SDS | 2.00 | 1 | P40S | 2 | 1 | | | | 10 | 0.205 | 49 | 66 | 79 | 86 | 92 | 81 | 86 | 1,D |
| AN | CEL | 20.0 | 10 | | LAC | 180.1 | 90 | | | | | | | | | | 10 | 4.775 | 0 | 0 | 0 | 0 | 6.4 | 2560 | 57 | 1,D |
| AO | CEL | 20.0 | 10 | | LAC | 176.0 | 88 | SDS | 2.00 | 1 | P8000 | 2 | 1 | | | | 10 | 0.353 | 34 | 46 | 56 | 64 | 77 | 80 | 86 | 1,D |
| AP | MAN | 150.1 | 50 | 45 | LAC | 147.1 | 49 | T3785 | 3.00 | 3 | | | | | | | 5 | 0.22 | 46 | 60 | 72 | 84 | 87 | 89 | 90 | 8,D |
| AQ | MAN | 150.1 | 50 | 45 | LAC | 150.0 | 50 | | | | | | | | | | 5 | 0.292 | 35 | 51 | 67 | 81 | 85 | 109 | 56 | 8,D |
| AR | MAN | 150.0 | 50 | 45 | LAC | 147.0 | 49 | DS | 3.02 | 3 | | | | | | | 5 | 0.274 | 38 | 53 | 67 | 80 | 84 | | 76 | 8,D |
| AS | NAA | 105.1 | 35 | 39 | MAN | 195.0 | 65 | | | | | | | | | | 80 | 0.189 | 53 | 70 | 82 | 87 | 91 | 80 | 81 | |
| AT | NAA | 105.0 | 35 | | MAN | 180.1 | 60 | MCC | 15.00 | 5 | | | | | | | 80 | 0.261 | 40 | 54 | 65 | 69 | 75 | 81 | 66 | D |
| AU | NAA | 105.0 | 35 | | MAN | 180.0 | 60 | PML | 15.10 | 5 | | | | | | | 80 | 0.243 | 42 | 58 | 69 | 76 | 85 | 83 | 51 | D |

Figure 6C

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | 2nd Matrix | | | Disintegrant | | | Time (mins.) | Particle Size | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| A | MTX | 1.5 | 30.0 | | LAC | 3.5 | 69.0 | P407 | 0.1 | 1.0 | | | | | | | | | | 60 | 0.16 | 63 | 77 | 84 | 89 | 93 | | 2 |
| B | MTX | 1.5 | 30.0 | | LAC | 3.5 | 70.0 | | | | | | | | | | | | | 60 | 0.28 | 40 | 52 | 59 | 59 | 71 | | 2 |
| C | MTX | 17.2 | 43.0 | | LAC | 22 | 56.0 | SDS | 0.4 | 1.0 | | | | | | | | | | 60 | 0.142 | 70 | 83 | 88 | 91 | 94 | | 2 |
| D | MTX | 20 | 50.0 | | LAC | 10.4 | 26.0 | SDS | 0.8 | 2.0 | P407 | 0.8 | 2 | SB | 8 | 20.0 | | | | 60 | 0.137 | 73 | 89 | 95 | 100 | 100 | | 9 |
| E | MTX | 2.5 | 50.0 | | LAC | 2.35 | 47.0 | SDS | 0.8 | 2.0 | P407 | 0.1 | 2 | | | | | | | 60 | 0.148 | 67 | 83 | 92 | 98 | 99 | | 2 |
| F | MTX | 17.2 | 43.0 | | MAN | 22.4 | 56.0 | SDS | 0.4 | 1.0 | | | | | | | | | | 60 | 0.254 | 42 | 55 | 64 | 67 | 72 | | 2 |
| G | MTX | 1 | 20 | | LAC | 4 | 80 | | | | | | | | | | | | | 60 | 13.45 | 0 | 0 | 0 | 0 | 0 | 92 | 2 |
| H | MTX | 1 | 20 | | LAC | 3.9 | 78 | SDS | 0.05 | 1 | P407 | 0.05 | 1 | | | | | | | 60 | 0.13 | 76 | 91 | 96 | 98 | 98 | 97 | 2 |
| I | MTX | 1.25 | 25 | | LAC | 2.85 | 68 | SDS | 0.05 | 1 | P407 | 0.05 | 1 | PVP | 0.05 | 1 | PRI | 0.25 | 5 | 50 | 0.201 | 50 | 67 | 80 | 84 | 84 | 85 | 2 |
| J | MTX | 60 | 30 | 33 | LAC | 137 | 67 | SDS | 3 | 1.5 | P407 | 3 | 1.5 | | | | | | | 5 | 3.943 | 20 | 27 | 30 | 31 | 38 | | 2 |
| K | MTX | 60 | 30 | 33 | LAC | 137 | 67 | SDS | 3 | 1.5 | P407 | 3 | 1.5 | | | | | | | 10 | 0.223 | 46 | 61 | 72 | 77 | 83 | | 2 |
| L | MTX | 60 | 30 | 33 | LAC | 137 | 67 | SDS | 3 | 1.5 | P407 | 3 | 1.5 | | | | | | | 16 | 0.153 | 64 | 79 | 86 | 93 | 96 | | 2 |
| M | MTX | 60 | 30 | 33 | LAC | 137 | 67 | SDS | 3 | 1.5 | P407 | 3 | 1.5 | | | | | | | 21 | 0.142 | 67 | 85 | 92 | 95 | 96 | | 2 |
| N | 7M | 151 | 94 | | | | | | | | PVP | 1.61 | 1 | | | | PRI | 8.04 | 5 | 2 | | | | | | | 97 | 2 |
| O | MTX | 60 | 30 | 33 | LAC | 137 | 67 | SDS | 3 | 1.5 | P407 | 3 | 1.5 | | | | | | | 20 | 0.8 | 32 | 42 | 48 | 51 | 63 | 70 | 2,E |

Figure 7A

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | 2nd Matrix | | | Time (mins.) | Particle Size | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| A | MEL | 48 | 10 | LAC | 417.6 | 87 | SDS | 14.4 | 3 | | | | | | | 3 | 0.15 | 66 | 83 | 90 | 91 | 94 | 97 | 1 |
| B | MEL | 24 | 5 | LAC | 439.2 | 91.5 | P188 | 14.4 | 3 | LEC | 2.4 | 0.5 | | | | 8 | 0.159 | 63 | 81 | 91 | 94 | 98 | 97 | 1 |
| C | MEL | 24 | 5 | MAN | 439.2 | 91.5 | P188 | 14.4 | 3 | LEC | 2.4 | 0.5 | | | | 8 | 0.144 | 70 | 88 | 94 | 95 | 98 | 92 | 1 |
| D | IND | 62.4 | 13 | LAC | 312 | 65 | SDS | 4.8 | 1 | | | | TA | 100.8 | 21 | 4 | 0.197 | 51 | 68 | 81 | 88 | 94 | 91 | |
| E | IND | 62.4 | 13 | LAC | 312 | 66 | | | | | | | TA | 100.8 | 21 | 4 | 0.19 | 53 | 71 | 85 | 92 | 97 | 74 | |
| F | IND | 62.4 | 13 | LAC | 312 | 65 | SDS | 4.8 | 1 | | | | TA | 100.8 | 21 | 4 | 0.194 | 52 | 71 | 86 | 93 | 97 | 84 | |
| G | IND | 48 | 10 | SUC | 427.2 | 89 | SDS | 4.8 | 1 | | | | | | | 5 | 0.213 | 47 | 64 | 76 | 84 | 92 | 93 | |
| H | IND | 48 | 10 | SUC | 427.2 | 89 | SDS | 4.8 | 1 | | | | | | | 6 | 0.192 | 52 | 72 | 87 | 93 | 96 | 94 | |
| I | MTX | 144 | 30 | LAC | 321.6 | 67 | SDS | 7.2 | 1.5 | P407 | 7.2 | 1.5 | | | | 4 | 0.243 | 44 | 58 | 68 | 74 | 84 | 93 | 2 |
| J | ANT | 50 | 10 | LAC | 445 | 89 | SDS | 5 | 1 | | | | | | | 4 | 0.288 | 32 | 51 | 73 | 86 | 91 | 90 | 5 |
| K | DIC | 72 | 15 | LAC | 403.2 | 84 | SDS | 4.8 | 1 | | | | | | | 3 | 0.186 | 54 | 74 | 89 | 95 | 98 | 94 | |
| L | NAA | 168 | 35 | MAN | 302.4 | 63 | SDS | 4.8 | 1 | PVP | 4.8 | 1 | | | | 6 | 0.226 | 44 | 63 | 80 | 88 | 93 | 94 | |
| M | NAA | 168 | 35 | MAN | 297.6 | 62 | SDS | 4.8 | 1 | PVP | 4.8 | 1 | P3000 | 4.8 | 1 | 7 | 0.287 | 31 | 52 | 73 | 85 | 93 | 98 | |
| N | COP | 48 | 10 | LFG | 427.2 | 89 | SDS | 4.8 | 1 | | | | | | | 7 | 4.319 | 0 | 0 | 0 | 3 | 16 | 93 | 10 |
| O | COP | 96 | 20 | LFG | 374.4 | 78 | LEC | 9.6 | 2 | | | | | | | 18 | 2.375 | 0 | 0 | 0 | 9 | 39 | 80 | 10 |
| P | CON | 144 | 30 | LFG | 326.4 | 68 | LEC | 9.6 | 2 | | | | | | | 1.5 | 4.027 | 0 | 0 | 0 | 7 | 23 | 83 | 10 |

Figure 8A

**Figure 9A**

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | 2nd Matrix | | | Time (mins.) | Particle Size | | | | | | No.Ave.(nm) | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | | |
| A | MEL | 40 | 5 | MAN | 732 | 91.5 | P188 | 24 | 3 | LEC | 4 | 0.5 | | | | 40 | 0.116 | 84 | 97 | 100 | 100 | 100 | | 96 | 1,I |
| B | MEL | 40 | 5 | MAN | 732 | 91.5 | P188 | 24 | 3 | LEC | 4 | 0.5 | | | | 45 | 0.122 | 82 | 97 | 100 | 100 | 100 | | 95 | 1,I |
| C | MEL | 40 | 5 | MAN | 732 | 91.5 | P188 | 24 | 3 | LEC | 4 | 0.5 | | | | 40 | 0.124 | 80 | 96 | 100 | 100 | 100 | | 97 | 1,I |
| D | MEL | 52.5 | 5 | LAC | 960.8 | 91.5 | P188 | 31.5 | 3 | LEC | 5.25 | 0.5 | | | | 50 | 0.156 | 64 | 81 | 89 | 90 | 93 | | 88 | 1,H |
| E | MEL | 40.0 | 5 | MAN | 732.0 | 91.5 | P188 | 24 | 3 | LEC | 4 | 0.5 | | | | 40 | 0.142 | 71 | 88 | 93 | 93 | 95 | | 96 | 1,I |
| F | SAL | 100.0 | 10 | LAC | 890.0 | 89 | LEC | 10.00 | | | | | | | | 15 | 0.137 | 72 | 85 | 89 | 90 | 92 | 75 | 92 | L |
| G | SAL | 100.0 | 10 | LAC | 900.0 | 90 | | | | | | | | | | 15 | 4.954 | 0 | 0 | 2 | 11 | 24 | | 95 | L |
| H | IND | 130.0 | 13 | LAC | 870.0 | 87 | | | | | | | | | | 36 | 0.18 | 56 | 74 | 89 | 96 | 98 | 80 | 65 | |
| I | IND | 130.1 | 13 | LAC | 860.1 | 86 | SDS | 10.00 | 1 | | | | | | | 36 | 0.192 | 52 | 73 | 90 | 95 | 97 | 83 | 85 | |
| J | IND | 130.1 | 13 | LAA | 870.0 | 87 | | | | | | | | | | 36 | 0.186 | 54 | 72 | 86 | 93 | 97 | 80 | 51 | |
| K | DIC | 150.1 | 15 | LAA | 850.3 | 85 | | | | | | | | | | 36 | 0.242 | 41 | 60 | 79 | 92 | 99 | 87 | 27 | |
| L | MEL | 105.0 | 10 | LAC | 913.5 | 87 | SDS | 31.50 | 3 | | | | | | | 20 | 0.137 | 74 | 90 | 95 | 95 | 96 | 79 | 94 | G |
| M | MEL | 105.1 | 10 | LAC | 945 | 90.0 | | | | | | | | | | 20 | | | | | | | | | 1,G |
| N | IND | 130.0 | 13 | LAA | 860 | 86 | SDS | 10 | 1 | | | | | | | 36 | 0.161 | 62 | 79 | 90 | 93 | 95 | | 80 | 11,N |
| O | IND | 130.0 | 13 | LAA | 645 | 64.5 | SDS | 10 | 1 | | | | TA | 215 | 21.5 | 36 | 0.160 | 62 | 79 | 90 | 94 | 96 | | 87 | 11,N |
| P | DIC | 150 | 15 | LAA | 840 | 84 | SDS | 10 | 1 | | | | | | | 36 | 0.152 | 66 | 84 | 95 | 98 | 99 | | 80 | 11,N |
| Q | MEL | 75 | 7.1 | LAC | 943.5 | 90.0 | SDS | 31.5 | 3 | | | | | | | 30 | 0.129 | 78 | 94 | | 100 | | | 89 | 1,M |
| R | MEL | 71.6 | 6.8 | LAC | 946.9 | 90.2 | SDS | 31.5 | 3 | | | | | | | 30 | 0.312 | 72 | 89 | 94 | 94 | 96 | | 92 | 1,F |
| S | IND | 120 | 12 | LAC | 435 | 43.5 | SDS | 10 | 1 | | | | TA | 435 | 43.5 | 44 | 0.168 | 60 | 79 | 92 | 98 | 100 | | 80 | 11,K |

**Figure 9B**

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | 2nd Matrix | | | Time (mins.) | Particle Size | | | | | | | No.Ave.(nm) | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | | | |
| T | IND | 130 | 13 | LAC | 645 | 64.5 | SDS | 10 | 1 | | | | TA | 215 | 21.5 | 36 | 0.160 | 63 | 79 | 93 | 97 | 99 | | | | 11 |
| U | IND | 130 | 13 | LAC | 645 | 64.5 | SDS | 10 | 1 | | | | TA | 215 | 21.5 | 36 | 0.179 | 56 | 72 | 89 | 95 | 97 | | | | 11 |
| V | IND | 130 | 13 | LAC | 645 | 64.5 | SDS | 10 | 1 | | | | TA | 215 | 21.5 | 40 | 0.182 | 55 | 70 | 83 | 87 | 92 | | | | 11 |
| W | DIC | 150 | 15 | LAC | 840 | 84 | SDS | 10 | 1 | | | | | | | 36 | 0.183 | 55 | 72 | 91 | 96 | 97 | | | | 11 |
| X | DIC | 150 | 15 | LAC | 840 | 84 | SDS | 10 | 1 | | | | | | | 36 | 0.186 | 54 | 74 | 94 | 98 | 99 | | | | 11 |
| Y | DIC | 150 | 15 | LAC | 840 | 84 | SDS | 10 | 1 | | | | | | | 36 | 0.203 | 49 | 69 | 92 | 97 | 98 | | | | 11 |
| Z | NAA | 334 | 35.1 | MAN | 599 | 62.9 | SDS | 9.55 | 1.0 | PVP | 9.55 | 1.0 | | | | 60 | 0.399 | 33 | 44 | 53 | 59 | 69 | | | | |
| AA | NAA | 334 | 35.1 | MAN | 599 | 62.9 | SDS | 9.55 | 1.0 | PVP | 9.55 | 1.0 | | | | 60 | 0.337 | 34 | 47 | 58 | 65 | 71 | | | | |
| AB | NAA | 334 | 35.1 | MAN | 599 | 62.9 | SDS | 9.55 | 1.0 | PVP | 9.55 | 1.0 | | | | 60 | 0.300 | 37 | 50 | 61 | 69 | 76 | | | | |
| AC | NAA | 334 | 35.1 | MAN | 599 | 62.9 | SDS | 9.55 | 1.0 | PVP | 9.55 | 1.0 | | | | 60 | 0.360 | 34 | 46 | 56 | 61 | 69 | | | | |
| AD | NAA | 334 | 35.1 | MAN | 599 | 62.9 | SDS | 9.55 | 1.0 | PVP | 9.55 | 1.0 | | | | 60 | 0.366 | 33 | 45 | 55 | 61 | 69 | | | | |
| AE | NAA | 334 | 35.1 | MAN | 599 | 62.9 | SDS | 9.55 | 1.0 | PVP | 9.55 | 1.0 | | | | 60 | 0.301 | 36 | 50 | 62 | 69 | 75 | | | | |
| AF | NAA | 334 | 35.1 | MAN | 599 | 62.9 | SDS | 9.55 | 1.0 | PVP | 9.55 | 1.0 | | | | 60 | 0.298 | 37 | 50 | 62 | 68 | 74 | | | | |
| AG | NAA | 334 | 35.1 | MAN | 599 | 62.9 | SDS | 9.55 | 1.0 | PVP | 9.55 | 1.0 | | | | 60 | 0.195 | 51 | 65 | 74 | 78 | 83 | | | | |
| AH | NAA | 334 | 35.1 | MAN | 599 | 62.9 | SDS | 9.55 | 1.0 | PVP | 9.55 | 1.0 | | | | 60 | 0.294 | 37 | 51 | 62 | 68 | 76 | | | | |
| AI | MEL | 105 | 11 | LAC | 864 | 86.4 | SDS | 31.5 | 3 | | | | | | | 20 | 0.189 | 53 | 72 | 84 | 88 | 94 | | | | F |
| AJ | MEL | 105 | 11 | LAC | 864 | 86.4 | SDS | 31.5 | 3 | | | | | | | 25 | 0.153 | 65 | 84 | 94 | 95 | 98 | | | | F |
| AK | MEL | 105 | 11 | LAC | 864 | 86.4 | SDS | 31.5 | 3 | | | | | | | 30 | 0.138 | 74 | 91 | 96 | 96 | 97 | | | | F |
| AL | MEL | 105 | 11 | LAC | 864 | 86.4 | SDS | 31.5 | 3 | | | | | | | 35 | 0.126 | 79 | 96 | 100 | 100 | 100 | | | 90 | F |

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Time (mins.) | Particle Size | | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| A | DIC | 2.50 | 10 | | MAN | 22.5 | 89 | SDS | 0.25 | 1 | 30 | 0.237 | 40 | 63 | 83 | 93 | 97 | | |
| B | NAA | 70 | 35 | | LAC | 128 | 64 | SDS | 2 | 1 | 60 | 0.224 | 72 | 81 | 92 | 81 | 92 | | |
| C | NAA | 70 | 35 | | MAN | 128 | 64 | SDS | 2 | 1 | 60 | 0.177 | 57 | 74 | 86 | 90 | 93 | | |
| D | NAA | 80 | 40 | 40 | LAC | 118 | 60 | | | | 45 | 2.039 | 19 | 26 | 31 | 36 | 49 | | |
| E | DIC | 1650 | 15 | | LAC | 9240 | 84 | SDS | 110 | 1 | 20 | 0.24 | 42 | 58 | 74 | 86 | 94 | 91 | |
| F | DIC | 3750 | 15 | | LAC | 21000 | 84 | SDS | 250 | 1 | 25 | 0.214 | 49 | 68 | 82 | 93 | 97 | 97 | |

Figure 10A

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | Surfactant #3 | | | Disintegrant | | | Time (mins.) | Particle Size | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | % v/v | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| A | NAA | 105 | 35 | 39 | MAN | 189 | 63 | SDS | 3 | 1 | P3000 | 3 | 1 | | | | | | | 80 | 0.19 | 53 | 71 | 84 | 91 | 95 | 90 | |
| B | NAA | 105 | 35 | 39 | MAN | 189 | 63 | SDS | 3 | 1 | P407 | 3.1 | 1 | | | | | | | 40 | 0.89 | 26 | 36 | 45 | 51 | 57 | | |
| C | NAA | 105 | 35 | 39 | MAN | 189 | 63 | SDS | 3 | 1 | P407 | 3.1 | 1 | | | | | | | 60 | 0.31 | 36 | 49 | 61 | 69 | 76 | | |
| D | NAA | 105 | 35 | 39 | MAN | 189 | 63 | SDS | 3 | 1 | P407 | 3.1 | 1 | | | | | | | 80 | 0.19 | 52 | 70 | 84 | 90 | 93 | 82 | |
| E | NAA | 105.1 | 35 | 39 | MAN | 192 | 64 | SDS | 3 | 1 | | | | | | | | | | 80 | 0.24 | 43 | 59 | 72 | 78 | 81 | 84.6 | |
| F | NAA | 105 | 35 | 39 | MAN | 171 | 57 | SDS | 3 | 1 | P3000 | 3 | 1 | PVP | 3 | 1 | PML | 15 | 5 | 80 | 0.27 | 39 | 54 | 67 | 74 | 78 | 89.2 | 12 |
| G | NAA | 105 | 35 | 39 | MAN | 171 | 57 | SDS | 3 | 1 | P407 | 3 | 1 | PVP | 3.02 | 1 | PML | 15.1 | 5 | 80 | | | | | | | 88.2 | |
| H | NAA | 105.2 | 35 | 39 | MAN | 174 | 58 | SDS | 3 | 1 | PVP | 3 | 1 | | | | PML | 15.0 | 5 | 80 | | | | | | | 87.1 | |
| I | NAA | 105 | 35 | 39 | MAN | 189 | 63 | SDS | 3 | 1 | P3000 | 3 | 1 | | | | | | | 80 | 0.25 | 27 | 67 | 91 | 100 | 100 | 88 | |
| J | NAA | 105.7 | 35 | 39 | MAN | 186 | 64 | SDS | 3 | 1 | P3000 | 3 | 1 | PVP | 3.01 | 1 | | | | 80 | 0.24 | 29 | 68 | 90 | 99 | 100 | 89.7 | |
| K | NAA | 105.1 | 35.0 | 39 | MAN | 195 | 65.0 | | | | | | | | | | | | | 80 | 0.19 | 53 | 70 | 82 | 87 | 91 | 81 | |
| L | NAA | 105 | 35.0 | | MAN | 180 | 60.0 | | | | | | | | | | MCC | 15 | 5 | 80 | 0.26 | 40 | 54 | 65 | 69 | 75 | 66 | 12,D |
| M | NAA | 105 | 35.0 | | MAN | 180 | 60.0 | | | | | | | | | | PML | 15 | 5 | 80 | 0.24 | 42 | 58 | 69 | 76 | 85 | 51 | 12,D |

Figure 11A

| Sample No. | Active material | | | Primary Matrix | | | Surfactant #1 | | | Surfactant #2 | | | Time (mins.) | Particle Size | | | | | | Yield (%) | Variations |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | Name | Mass (g) | % w/w | | D(0.5) µm | % <0.20 µm | % <0.30 µm | % < 0.5 µm | % < 1.0 µm | % < 2.0 µm | | |
| A | NAA | 1.5 | 30 | LAC | 3.2 | 64 | SDS | 0.05 | 1 | MCC | 0.25 | 5 | 40 | 2.6 | 29 | 41 | 47 | 61 | 77 | 86 | |
| B | 14A | | | | | | | | | | | | | 0.2 | 68 | 79 | 84 | 94 | 99 | | 12 |
| C | NAA | 1.5 | 30 | LAC | 3.45 | 69 | SDS | 0.05 | 1 | | | | 40 | 0.2 | 79 | 95 | 98 | 100 | 100 | 95 | |
| D | 14C | | | | | | | | | | | | | 0.2 | 80 | 94 | 97 | 100 | 100 | | 12 |
| E | 14C | 2.5 | 95 | MCC | 0.13 | 5 | | | | | | | 1 | 1.3 | 34 | 49 | 52 | 56 | 60 | 88 | |
| F | 14C | 2.5 | 91 | MCC | 0.25 | 9 | | | | | | | 1 | 0.8 | 36 | 52 | 56 | 62 | 72 | 83 | |
| G | 14E | | | | | | | | | | | | | 0.2 | 79 | 92 | 96 | 99 | 100 | | 12 |
| H | 14F | | | | | | | | | | | | | 0.2 | 79 | 93 | 97 | 99 | 100 | | 12 |
| I | NAA | 1.5 | 30 | LAC | 2.95 | 59 | SDS | 0.05 | 1 | MCC | 0.5 | 10 | 40 | 6.4 | 12 | 19 | 25 | 43 | 64 | 96 | |
| J | NAA | 1.5 | 30 | LAC | 2.45 | 49 | SDS | 0.05 | 1 | MCC | 1 | 20 | 40 | 8.6 | 0 | 0 | 7 | 31 | 56 | 95 | |
| K | 14I | | | | | | | | | | | | | 1.7 | 32 | 44 | 53 | 77 | 94 | | 12 |
| L | 14J | | | | | | | | | | | | | 4.1 | 0 | 0 | 12 | 61 | 92 | | 12 |

Figure 12A