|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Isotope | Smallest critical mass in spherical shape for aqueous solution at optimum moderation | | Smallest critical mass in spherical shape for metal (fast systems) | |
|  | Unreflected (kg) | Water-reflected (kg) | Unreflected (kg) | Steel- reflected (kg) |
| U-233 | 1.080 | 0.568 | 15.8 | 6.1 |
| U-235 | 1.420 | 0.784 | 46.7 | 16.8 |
| Np-237 | - | - | 63.6 | 38.6 |
| Pu-238 | - | - | 9.5 | 4.7 |
| Pu-239 | 0.877 | 0.494 | 10.0 | 4.5 |
| Pu-240 | - | - | 35.7 | 19.8 |
| Pu-241 | 0.511 | 0.246 | 12.3 | 5.1 |
| Am-241 | - | - | 57.6 | 33.8 |
| Am-242 | 0.042 | 0.020 | 8.8 | 3.0 |
| Cm-243 | 0.280 | 0.127 | 8.4 | 3.1 |
| Cm-244 | - | - | 26.6 | 13.2 |
| Cm-245 | 0.116 | 0.054 | 9.1 | 3.5 |
| Cm-247 | 4.060 | 2.180 | 6.9 | 2.8 |
| Cf-249 | 0.129 | 0.060 | 5.9 | 2.4 |
| Cf-251 | 0.048 | 0.025 | 5.5 | 2.3 |