



The Cell Freezing Container Advantage



| Alcohol-Filled Container | Alcohol-Free Cell Freezing Container |
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| <p>Requires isopropanol</p> <ul style="list-style-type: none"> • Replace alcohol every 5 uses • Keep track of number of uses • Pre-cool alcohol in refrigerator | <p>No alcohol</p> <ul style="list-style-type: none"> • No fluids • No pre-cooling |
| <p>Inconsistent freeze rate</p> <ul style="list-style-type: none"> • Alcohol degradation induces variability • Two circles of wells - different freeze rates for each | <p>No variability</p> <ul style="list-style-type: none"> • All vials have uniform freeze rate • Radially symmetric design ensures consistency |
| <p>Approximately \$350/year</p> <ul style="list-style-type: none"> • Change alcohol weekly • Disposal of hazardous waste | <p>No on-going cost</p> <ul style="list-style-type: none"> • No alcohol purchase or disposal |
| <p>Difficult to handle</p> <ul style="list-style-type: none"> • Screw cap difficult to remove when frozen • Frozen unit is slippery and cold to touch | <p>No stuck lids</p> <ul style="list-style-type: none"> • Lid comes off easily when frozen • Not cold to the touch when removing from the -80°C freezer |
| <p>Wait between runs</p> <ul style="list-style-type: none"> • Takes >1 hour for device to return to room temperature for re-use | <p>Quick re-use time</p> <ul style="list-style-type: none"> • Ready to use again after five minutes |
| <p>Large thermal mass impacts local freezer area</p> <ul style="list-style-type: none"> • Large heat capacity removed from alcohol impacts nearby samples | <p>Low impact on freezer</p> <ul style="list-style-type: none"> • 1/3 the heat impact on freezer compared to alcohol-filled units |