



The Cell Freezing Container Advantage



Alcohol-Filled Container	Alcohol-Free Cell Freezing Container
<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