

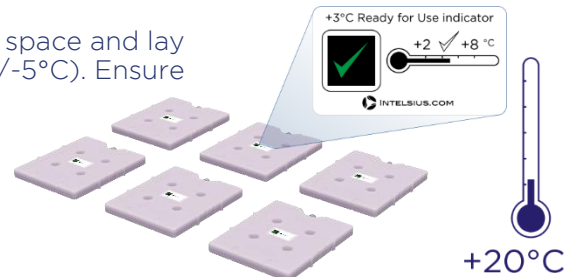
ORCA Multi-Use 2 to 8°C Conditioning Guides

FREEZER TO ROOM TEMPERATURE PREPARATION

1. Place the ORCA Multi-Use bottles into a freezer and allow sufficient time for the bottles to completely freeze (suggested minimum time of 24hrs at a warmest temperature of -18°C). These should be spaced out in the controlled freezer space until completely frozen. Ensure all parts of all ORCA Multi-Use bottles have been cooled such that the bottles are frozen solid throughout. Once suitably frozen the bottles can be held in the freezer space until the ORCA systems are ready to use.



2. Take the frozen ORCA Multi-Use bottles from the freezer space and lay the bottles in a room temperature environment ($+20^{\circ}\text{C} \pm 5^{\circ}\text{C}$). Ensure they are well spaced with sufficient airflow over the labelled face. The bottles require a minimum time of 40 minutes at this temperature in this space before they are ready for use*.



The ideal temperature for packing is $+3^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$. If the temperature is above $+4^{\circ}\text{C}$, the performance will suffer. If the temperature is below $+2^{\circ}\text{C}$, then there is a risk of cold shocking the payload. We recommend if the surface temperature of the bottles is above $+4^{\circ}\text{C}$ at any time during this period restart preparation from 1. If the surface temperature of the bottle is above $+5^{\circ}\text{C}$ at any time during this period preparation **must** be restarted from 1.

3. The ORCA Multi-Use bottles define a fixed payload space where temperature control is maintained. Place one bottle flat in the base of the ORCA case with the long edges facing the front and back of the system. Pack two bottles against the front and back of the ORCA case with the shortest edge in contact with the base of the ORCA insulation. Pack a further two bottles against the sides of the ORCA case, one on each side, with the longest side of the bottles resting on the bottom bottle. The payload can be placed into the area defined by the bottles. The remaining bottle can now be put on top in the same orientation as the bottom bottle. This bottle will be propped up by the two side bottles.



4. Close the outer case lid, secure the fasteners and seal with two strips of packing tape following the tape area marked with dotted lines. The ORCA is now ready to be shipped.

NOTICE

Do not puncture, scratch or bend the white vacuum insulation panels. This may result in vacuum loss, which will significantly reduce system performance. Each panel should feel rigid and have a tense surface. If the vacuum has been lost panels will feel soft, flaccid and have a loose-fitting surface.

If you believe any panel has been damaged do not use this system and refer to your local SOP or your Intelsius representative for guidance.

Intelsius recommend that customers conduct validation work of the preparation guidelines based on specific equipment, processes and ambient environment in line with Good Distribution Practices (GDP).

*For alternative preparation protocols please see *Alternative ORCA Conditioning Guide [P23098-R1]*.