

2. Assembly

OSU113 ORCA Single Use 4L -25°C to -15°C



Component		Quantity
A	VIP Panel	6
B	ORCA Single Use PCM Cassettes	6
C	Payload Area	1
D	Outer Cardboard Carton	1

2.1 Conditioning

- 2.1.1 Place the ORCA Single Use PCM cassettes in a freezer with a minimum temperature of -30°C for a minimum time of 48 hours.
- 2.1.2 Spread the cassettes across a shelf with plenty of airflow to provide uniform, quick freezing of the PCM. Stacking the cassettes may result in inadequate freezing of the PCM and will take longer to become fully solid.
- 2.1.3 Before using, ensure that the PCM cassettes are solid throughout by gently pressing the cardboard cassette. If not solid, then continue to freeze until the PCM is frozen. Once suitably frozen, the PCM cassettes can be stored in the freezer until needed.
- 2.1.4 The PCM cassettes can be directly packed from a -30°C freezer into the ORCA Single Use 4L system along with the payload ready for use.
- 2.1.5 The cassettes have an aperture to check the surface temperature of the PCM brick (see image below). This will allow the user to assess the temperature of the PCM before packing.



Figure: The check coolant temperature aperture on each PCM cassette

2.2 Packing Instructions

- 2.2.1 Pack the ORCA Single Use 4L system with the front of the case facing you.
- 2.2.2 Place one PCM cassette in the base of the VIP build with the coloured side running left to right (Bi).
- 2.2.3 Pack two PCM cassettes, one at the front and one at the back, with the shortest side resting on the base of the VIP panel and the coloured sides running vertically (Bii).
- 2.2.4 Pack a further two cassettes against the sides of the ORCA Single Use insulation, one on each side, with the longest side resting on the base cassette and the coloured sides running front to back (Biii).
- 2.2.5 The payload can now be inserted into the space defined by these 5 cassettes. Place the remaining cassette flat on top, this cassette should rest on the left and right cassettes with the coloured sides running left to right (Bi)
- 2.2.6 Replace the lid VIP and close the outer carton lid and secure the lid following the tape area marked with dotted lines. Your ORCA Single Use is now ready to be shipped