

## Technical Specifications of Ice Pack for vaccine carrier

Clause	Particulars	Sub clause	Specifications
1	<b>Brief Description</b>	1.1	Ice packs are used with vaccine carrier for transportation of UIP vaccine from PHC to session site
2	<b>Water Content</b>	2.1	0.3 liter
3	<b>External Dimensions</b>	3.1	163x90x33 mm $\pm$ 1mm
4	<b>Empty weight</b>	4.1	75 to 80 grams
5	<b>Robustness</b>	5.1	The icepack sample shall withstand a one meter drop on every face, edge and corner when in frozen state (-10°C to -20°C). it will then successfully pass the leakage test after thawing.
6	<b>Leakage test</b>	6.1	No leaks when 40 kg lateral force is applied.
7	<b>Features:</b>	7.1	Effective reinforcement to restrain walls against swelling.
		7.2	Removable cap for filling; cap to have effective internal water seal to resist 40 kg lateral force with no leakage.
		7.3	Manufacturer's recommended filling line to be clearly indicated.
8	<b>Freezing characteristics</b>	8.1	Shall not display super cooling characteristics when filled with demineralised water and frozen in flat, horizontal contact with an evaporator at -8°C.
		8.2	Maximum thickness of the icepack, when frozen solid and laid flat on an evaporator surface, shall not exceed the unfrozen thickness by more than 10%.
		8.3	The equipment should meet WHO equipment performance specifications.
9	<b>Type Test</b>	9.1	The Ice pack need to be Type-tested by an independent ISO/IEC 17025 testing laboratory, accredited for Type Testing of COLD BOXES and VACCINE CARRIERS by WHO/ UNICEF/ STQC/ NABL compared to full conformity with the requirements of specification E 005/IP01; and Quality Control testing to be carried out in accordance with the requirement of ISO 17025:2000 or later edition

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