

CLAIMS

1. A cell culture container comprising:
a base section, and
5 a compressible wall element extending from the base section in an axial direction and defining an internal volume of the cell culture container, the compressible wall element being compressible in the axial direction,
wherein the base section comprises a substantially planar rigid base plate.
- 10 2. The cell culture container of claim 1, wherein the compressible wall element is adhered or welded to the rigid base plate.
3. The cell culture container of claim 1, wherein the compressible wall element is clamped or clipped onto the rigid base plate.
- 15 4. The cell culture container of claim 1, wherein the compressible wall element is integrally moulded with the rigid base plate, for example the rigid base plate is over-moulded onto a part of the compressible wall element.
- 20 5. The cell culture container of any preceding claim, wherein the compressible wall element comprises a deformable portion disposed at or immediately adjacent to a join between the compressible wall element and the rigid base plate.
- 25 6. The cell culture container of any preceding claim, further comprising a base sheet extending over the rigid base plate within the internal volume of the cell culture container.
7. The cell culture container of claim 6, wherein the base sheet extends from the compressible wall element, in particular the base sheet is integrally moulded with the compressible wall element.

8. The cell culture container of claim 6 or claim 7, wherein the base sheet is gas permeable, in particular oxygen permeable.
9. The cell culture container of claim 8, wherein the rigid base plate comprises one or
5 more gas permeable openings.
10. The cell culture container of claim 8 or claim 9, wherein the rigid base plate comprises one or more spacers adapted to space the base sheet from the rigid base plate.
- 10 11. The cell culture container of any preceding claim, wherein the compressible wall element comprises an inwardly deformable portion, an outwardly deformable portion, and a leaf portion extending between the inwardly deformable portion and the outwardly deformable portion such that deformation of the inwardly deformable portion and the outwardly deformable portion causes the compressible wall element to compress.
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12. The cell culture container of claim 11, wherein one of the inwardly deformable portion or the outwardly deformable portion is disposed at or immediately adjacent to a join between the compressible wall element and the rigid base plate.
- 20 13. The cell culture container of any preceding claim, wherein the rigid base plate comprises a transparent or translucent sensor window.
14. The cell culture container of any preceding claim, wherein the compressible wall element comprises a silicone, or a low density polyethylene, or a thermoplastic elastomer.
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15. The cell culture container of any preceding claim, wherein the compressible wall element comprises an outer portion and a liner or insert.
16. The cell culture container of any preceding claim, wherein the compressible wall
30 element comprises an inner portion and a jacket.

17. The cell culture container of any preceding claim, wherein at least a part of the compressible wall element comprises a gas impermeable coating.
18. The cell culture container of any preceding claim, wherein the rigid base plate
5 comprises a high density polyethylene or a polycarbonate.
19. The cell culture container of claim 18, wherein the rigid base plate is transparent or translucent, or comprises a transparent or translucent sensor window.
- 10 20. A bioreactor for a cell culturing process, the bioreactor comprises the cell culture container of any of claims 1 to 19.
21. The bioreactor of claim 20, further comprising an interface plate attachable to the compressible wall element opposite to the base section to close the cell culture container.
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22. The bioreactor of claim 21, wherein the interface plate comprises a connector interface.
23. A cell processing system comprising the bioreactor of any of claims 20 to 22.
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24. The cell processing system of claim 23, further comprising an agitator configured to move the base section to agitate a fluid in the cell culture container.