

NEST

OptiFlask®



OptiFlask® Erlenmeyer Flask

NEST Erlenmeyer Flask collection is designed for suspension cell culture, and is ideal for small-scale research and industrial production of vaccines, proteins, monoclonal antibodies and biopharmaceuticals.

NEST provides Erlenmeyer Flasks in sizes ranging from 125 to 3000mL, as well as High Efficiency Erlenmeyer Flasks in sizes of 2-5L. Each size option comes with a choice of a seal or vent cap, as well as the option of a flat bottom or a bottom with baffles. The Erlenmeyer Flasks are available in both PC and PETG.

Accordingly, NEST offers customized transfer caps that are compatible with our Erlenmeyer Flask collection. These caps come in various sizes and can also be tailored to accommodate diverse requirements, allowing for liquid transfer and cultivation in a closed environment.

STRICT PRODUCT QUALITY SUPERVISION

Production environment--Class 10,000 clean production workshop

NEST Factory™ is produced in a dedicated 10,000-class clean room, and other products are produced in a 100,000-class clean room.

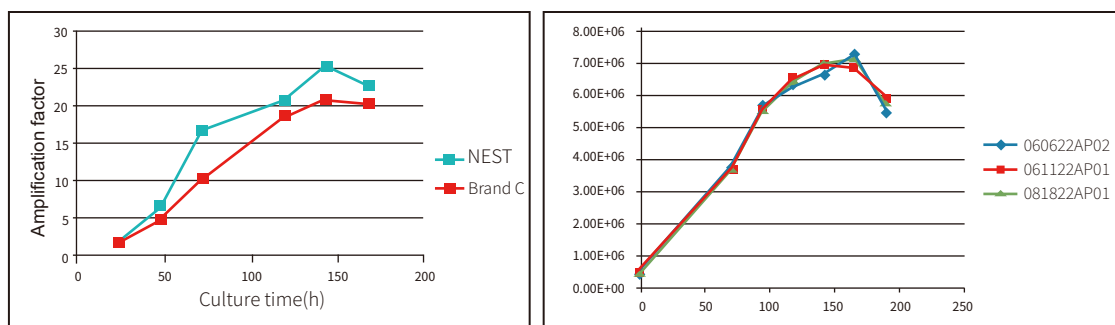
Production material--Strictly selected polystyrene conforming to USP Class VI standard

Quality Assurance from Professional Testing Agencies

NEST ensures top product quality, stability, safety, applicability, and effectiveness through the implementation of state-of-the-art production technology and a strict quality control system. All our product ranges have undergone rigorous validation by professional testing institutions possessing national testing qualifications (CMA, CNAS). The internationally recognized testing results provide further assurance.

Performance Testing

Relevant performance testings include sealing test, pressure resistance test, inter-batch stability, endotoxin, nucleic acid enzyme, and cell culture comparative experiments.



Biosafety testing

Refer to <<State Food and Drug Administration National Standards for Packaging Materials and Containers in Direct Contact with Drugs (Series 6)>>, The product is tested for cytotoxicity, sensitization, intradermal irritation, acute systemic toxicity and hemolysis.

Physical and chemical safety testing

Refer to <<State Food and Drug Administration National Standards for Packaging Materials and Containers in Direct Contact with Drugs (Series 6)>>, The products are tested for insoluble particles, ignition residues, metal elements, and dissolved substances (clarity, color, pH, UV absorbance, non-volatile matter, easy oxides, heavy metals).

Testing item	Detection limit (mg/L)	Test result (mg/L)	Testing item	Requirement or detection limit	Testing result
Lead	0.05	N.D.	Reducing substances (consumption of c(1/5KMnO4)=0.01mol/L)	≤0.5 mL	0.12
Tin	0.04	N.D.	Acid-base pH (compared with blank solution)	< 1	0.22
Cadmium	0.02	N.D.	Evaporated residue, mg/50mL	< 2.5 mg	0.9
Chromium	0.03	N.D.	UV absorbance 230nm~360nm	< 0.05	0.0070
			Appearance	Colorless and transparent	Colorless and transparent
			Lead content, µg/mL	< 0.05	Below the detection limit
			Tin content, µg/mL	< 0.04	Below the detection limit
			Cadmium content, µg/mL	< 0.02	Below the detection limit
			Chromium content, µg/mL	< 0.03	Below the detection limit

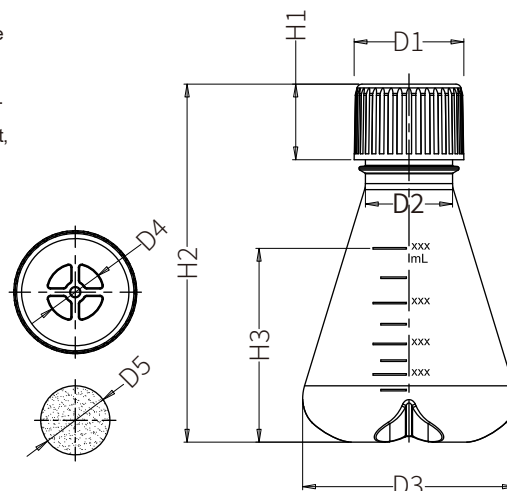
Sterility and particle guarantee

NEST ensures thorough testing of its products through examinations of the irradiation process, packaging, and insoluble particles. The verification of the irradiation dose distribution is conducted in accordance with ISO 11137-1:2015, meeting the necessary requirements for sterilization irradiation dose (SAL=10⁻⁶).

OptiFlask® Erlenmeyer Flask



- Erlenmeyer Flask collection is suitable for suspension cell culture or bacterial culture, and can also be used for medium preparation, mixing, and storage.
- The body is made of PETG/PC, and the cap is made of PP. Both materials comply with USP Class VI.
- Qualified by the USP Class 6 Standard, PC bottle with high transparency, is resistant to strong impact, oxidation and high temperature up to 121 °C.
- Vent caps with 0.22 µm hydrophobic filters for gas exchange without contamination.
- The baffled bottom can improve gas exchange efficiency and ensure better oxygen dissolution in the culture medium, but it also increases cell shear force.
- Individually packaged in sterile bags
- There's a scale made by injection molding on the flask body to facilitate observing the filled liquid volume.
- Non-Pyrogenic, DNase/Rnase free.
- Sterilized by E-beam, SAL=10⁻⁶.



● Erlenmeyer Flask

Volume(mL)	Bottom Type	D1	D2	D3	D4 Vent Filter Cap	D5 Vent Filter Cap	H1	H2	H3	Packing		PETG		PC	
										/Pack	/Case	Seal Cap	Vent Filter Cap	Seal Cap	Vent Filter Cap
125	Flat-bottom	38.00	29.30	65.80	14.85	22.50	29.50	115.00	59.20	1	24	781001	781011	781101	781111
	Baffled	38.00	29.30	65.80	14.85	22.50	29.50	113.00	57.20	1	24	781301	781311	781201	781211
250	Flat-bottom	42.80	34.00	82.50	21.65	27.00	29.50	137.30	73.10	1	12	782001	782011	782101	782111
	Baffled	42.80	34.00	82.50	21.65	27.00	29.50	137.30	73.10	1	12	782301	782311	782201	782211
500	Flat-bottom	48.00	39.00	101.00	21.65	27.00	29.50	179.00	104.50	1	12	783001	783011	783101	783111
	Baffled	48.00	39.00	101.00	21.65	27.00	29.50	178.00	103.50	1	12	783301	783311	783201	783211
1000	Flat-bottom	48.00	39.00	128.00	21.65	27.00	29.50	207.70	142.40	1	6	784001	784011	784101	784111
	Baffled	48.00	39.00	128.00	21.65	27.00	29.50	204.20	138.90	1	6	784301	784311	784201	784211
2000	Flat-bottom	54.00	46.90	162.00	19.00	27.00	25.00	285.50	152.30	1	6	/	/	785001	785011
	Baffled	54.00	46.90	162.00	19.00	27.00	25.00	285.50	152.30	1	6	/	/	/	/
3000	Flat-bottom	75.50	72.50	230.00	36.00	44.00	25.00	253.50	97.00	1	4	/	/	786001	786011
	Baffled	75.50	72.20	230.00	36.00	44.00	25.00	253.50	97.00	1	4	/	/	786005	786015

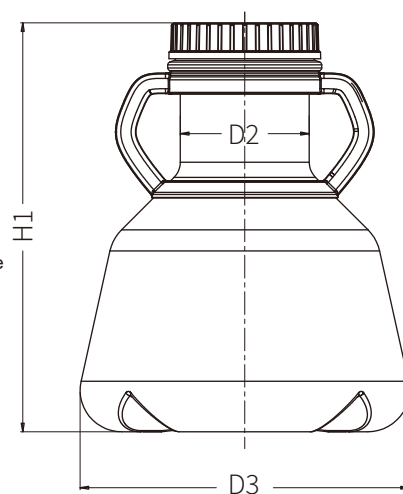
Your Best Choice For Laboratory And Medical Consumables

OptiFlask® Erlenmeyer Flask, High Efficiency



High-efficiency, large-volume culture flasks allow cells to show strong viability with large expression amount of proteins in the culture of mammalian cells and insect cells. During the culturing process, the use rate of the shaker is significantly increased, and the survival rate and viability of cells are both dramatically elevated. NEST culture flasks also provide high repeatability, which allows highly inter-batch consistency of cell growth and yield.

- Qualified by the USP Class 6 Standard, PC bottle with high transparency, is resistant to strong impact, oxidation and high temperature up to 121 C .
- Obvious and accurate scale.
- The vent cap is covered with a 0.2 μm vent membrane, watertight but not airtight.
- Equipped with transfer Cap, more safe and convenient operation.
- Individually packaged in sterile bag.
- Non-Pyrogenic, DNase/Rnase free.
- Suitable for suspension cell culture or bacterial culture, as well as for medium preparation, mixing, and storage
- Sterilized by E-beam, SAL=10⁻⁶.



● Erlenmeyer Flask, High Efficiency

Volume (L)	Dimension (mm)			Cap Style	/Case	Cat.No.	
	H1	D2	D3			Flat-bottom	With Baffles
2.0	213.5	67	162	Seal Cap	4	785101	785105
	213.5	67	162	Vent Filter Cap	4	785111	785115
3.0	253.5	67	162	Seal Cap	4	786101	786105
	253.5	67	162	Vent Filter Cap	4	786111	786115
3.0Wide-mouth	253.5	90	162	Seal Cap	4	786501	786505
	253.5	90	162	Vent Filter Cap	4	786511	786515
5.0	253.5	90	230	Seal Cap	4	787001	787005
	253.5	90	230	Vent Filter Cap	4	787011	787015