








Basics to determine the ideal volume of culture medium for use in TPP tissue culture vessels

Important: Data depends on the respective cells being used. Calculation examples here refer to the use of HeLa-cells. Volume recommendations must be seen as guideline and do not represent an absolute value. TPP is not responsible for any outcome in this regard.

1. Tissue Culture Test Plates

Product No.	Version	No. of Wells	Size Growth area/well (mm ²)	Cell Count for Seeding	Cell Count at Confluence	Medium recom. (ml)	Medium max. (ml)
92006 92406		6	896.0	0,30 x 10 ⁶	1,10 x 10 ⁶	3 - 5	10
92012 92412		12	959.6	0,10 x 10 ⁶	0,41 x 10 ⁶	1 - 2	5
92024 92424		24	186.2	0,05 x 10 ⁶	0,22 x 10 ⁶	0,5 - 1	3
92096 92696		96	33.5	0,90 x 10 ⁴	4,00 x 10 ⁴	0,1 - 0,25	0.4
92097 92697		96	39.6	0,94 x 10 ⁴	4,10 x 10 ⁴	0,1 - 0,25	0.4

2. Tissue Culture Dishes

Product No.	Inner-Ø (mm ²)	Size Growth area (mm ²)	Cell Count for Seeding	Cell Count at Confluence	Medium recom. (ml)	Medium max. (ml)
93040	34	920	0,3 x 10 ⁶	1,1 x 10 ⁶	2	4
93060	53	2'210	0,6 x 10 ⁶	2,5 x 10 ⁶	3	15
93100	87	6'010	1,7 x 10 ⁶	6,8 x 10 ⁶	10	60
93150	137	14'780	4,2 x 10 ⁶	16,7 x 10 ⁶	20	155

3. Tissue Culture Flasks

Product No.	Version	(cm ²)	Size Growth area (mm ²)	Cell Count for Seeding	Cell Count at Confluence	Medium recom. (ml)	Medium max. (ml)
90025	VENT	25	2'500	0,7 x 10 ⁶	2,8 x 10 ⁶	3 - 5	15
90026	Filter						
90075	VENT	75	7'500	2,1 x 10 ⁶	8,5 x 10 ⁶	8 - 15	65
90076	Filter						
90150	VENT	150	15'000	4,2 x 10 ⁶	16,9 x 10 ⁶	15 - 30	165
90151	Filter						
90300	VENT	300	30'000	8,4 x 10 ⁶	33,8 x 10 ⁶	30 - 50	410
90301	Filter						

4. Tissue Culture Tubes

Product No.	Version	(cm ²)	Size Growth area (mm ²)	Cell Count for Seeding	Cell Count at Confluence	Medium recom. (ml)	Medium max. (ml)
91253	Filter	10	1000	1.5 x 10 ⁶	3 x 10 ⁶	2	18
91106	VENT	20	2000	1.5 x 10 ⁶	3 x 10 ⁶	3	13

Source: Freshney R. Culture of animal cells Wiley-Liss 1994, TPP, co-operation. Biochrom AG, Berlin