



Homogenisers

General Purpose
Mini Series
Round Body
Safe-Seal
Dounce
Griffiths Tube
Duo-Form





GPE Scientific has been manufacturing Tissue Grinders for over 60 years and has supplied them to laboratories throughout the world. Our comprehensive range is robustly constructed in sterilisable heat resisting glass in capacities from 0.1ml to 55ml.



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Homogenisers

Borosilicate Glass, General Purpose Homogenisers and Potter-Elvehjem

General Purpose Homogeniser



- Precision Bore Borosilicate glass mortars with a range from 5.0 to 55ml capacity
- Borosilicate glass pestle
- All parts are fully autoclavable

Grinding Clearance Pestle and Mortar - 0.152 - 0.254mm

Prod Code	Capacity (ml)	Chamber Length (mm)	Overall Length (mm)	Length (mm)	Pestle Diameter (mm)
22001	5	65	95 Mortar	Pestle 195	10
22002	10	75	115 Mortar	Pestle 215	13
22003	15	80	120 Mortar	Pestle 220	15
22004	30	105	150 Mortar	Pestle 250	19
22005	55	125	175 Mortar	Pestle 295	25

Potter-Elvehjem Homogeniser - Handle Optional*



- Potter-Elvehjem Homogenisers are designed to work with soft tissue. See chart on Page 8
- Precision Bore glass mortars with a range from 5.0 to 55ml capacity
- PTFE Pestle
- Standard Stainless steel rod for use with an electric motor
- Optional Stainless steel handle for manual grinding
- All parts are fully autoclavable

Grinding Clearance Pestle and Mortar - 0.076 - 0.126mm

*Additional Handle - Product Code 20310

Prod Code	Capacity (ml)	Chamber Length (mm)	Overall Length (mm)	Length (mm)	Pestle Diameter (mm)
22006	5	65	95 Mortar	Pestle 250	10
22007	10	75	115 Mortar	Pestle 250	13
22008	15	80	120 Mortar	Pestle 250	15
22009	30	105	150 Mortar	Pestle 250	19
22010	55	125	175 Mortar	Pestle 250	25

Homogenisers

Safe-Seal Homogenisers,Dounce Tissue Grinders

Safe-Seal Homogenisers



Supplied complete with a PTFE Pestle, stainless steel handle and borosilicate glass mortar which is stoppered in PTFE to protect against splash back during the grinding process, as suggested in the Howie Report 1972 for preventing infection in clinical laboratories.

Prod Code	Capacity (ml)	Chamber Length (mm)	Overall Length (mm)	Pestle Diameter (mm)
20601	5	65	250	10
20602	10	75	250	13
20603	15	80	250	15
20604	30	105	250	19

Dounce Tissue Grinders



All-glass Dounce tissue grinders designed for fine particle size reductions without damage to cell nuclei. Supplied with two interchangeable pestles ground and polished to 'large' and 'small' clearances for use in the same tube. Large pestle used for sample preparation. Tight pestle for final homogenate. Supplied 2 per pack.

Prod Code	Capacity (ml)	Chamber Length (mm)	Clearance - Large (mm)	Clearance - Small (mm)	Mortar OD (mm)	Pack Size	Pestle Diameter (mm)
20901	1	48	0.025	0.05	11.9	2	7.5
20902	7	82	0.04	0.07	16.6	2	13
20903	15	94	0.045	0.07	18.6	2	15
20904	40	140	0.055	0.11	30.6	2	25

Homogenisers

Mini Series Homogenisers

Mini Series Homogenisers With Handle



Manufactured from high quality borosilicate glass, this range of mini homogenisers is ideal for micro tissue work. Supplied complete and fully autoclavable. Bodies are clear precision glass. Pestles have ground glass working length. With or without handles.

Grinding Clearance Pestle and Mortar - 0.152 - 0.254mm

Prod Code	Capacity (ml)	Chamber Length (mm)	Pestle Diameter (mm)
20401	0.1	31	3.65
20402	1	55	5
20403	3	60	9

Mini Series Homogenisers Without Handle



Prod Code	Capacity (ml)	Chamber Length (mm)	Pestle Diameter (mm)
20404	0.1	31	3.65
20405	1	55	5
20406	3	60	9

Homogenisers

Round Body and Tenbroeck Style Homogenisers

The all-glass Uni-Form range of Round Body tissue grinders is made from sterilisable heat-resisting glass in capacities 5ml to 55ml. Models are available with rod ends for standard manual use, or hollow pestles Tenbroeck Style designed for use with coolants/dry ice.

Bodies are available in clear precision glass or ground glass for more effective homogenisation of tougher tissues, see types below.

Grinding clearance pestle and mortar 0.152 - 0.254mm.

Standard Round Body Homogeniser



Prod Code	Capacity (ml)	Chamber Length (mm)	Pestle Diameter (mm)	Type
20701	5	65	10	Clear
20702	10	75	13	Clear
20703	15	80	15	Clear
20704	30	105	19	Clear
20705	55	125	25	Clear
20711	5	65	10	Ground
20712	10	75	13	Ground
20713	15	80	15	Ground
20714	30	105	19	Ground
20715	55	125	25	Ground

Tenbroeck Style Homogeniser *



Prod Code	Capacity (ml)	Chamber Length (mm)	Pestle Diameter (mm)	Type
20706	5	65	10	Clear
20707	10	75	13	Clear
20708	15	80	15	Clear
20709	30	105	19	Clear
20710	55	125	25	Clear
20716	5	65	10	Ground
20717	10	75	13	Ground
20718	15	80	15	Ground
20719	30	105	19	Ground
20720	55	125	25	Ground

*Interior of pestle is hollow allowing coolant to be added to reduce heat generated in grinding process.

Homogenisers

Griffiths Tube Tissue Grinders

Griffiths Tubes are produced from standard tubing unlike the majority of tissue grinders which we produce from precision bore tubing. Therefore there is a significant price saving, perfect for general work where tight tolerances are unnecessary.

Griffiths Tube - Small



For grinding bacterial emulsions and tissues, tube 90-95mm long, 18mm OD narrowing to a ground rounded end. Ground half spherical pestle and mortar ends ensure perfect grinding.

Prod Code	Capacity (ml)	Chamber Length (mm)	Overall Length (mm)	Pestle Diameter (mm)
20501	5	80	150	12

Griffiths Tube - Large



Ground pestle and mortar, pestle has projections for coarse grinding. Mortar length 220mm.

Prod Code	Capacity (ml)	Chamber Length (mm)	Overall Length (mm)	Pestle Diameter (mm)
20502	15	95	305	15

Homogenisers

Duo-Form Homogenisers

A conical and cylindrical surface combination giving two separate areas, one for initial grinding and a second for final homogenisation.

Homogenisers, Borosilicate Glass, Duo-Form



Prod Code	Description
20801	Plain rod style for machine drive, ground body, 15ml
20802	Plain rod style for machine drive, clear body, 15ml
20803	Hand type, ground body, 15ml
20804	Hand type, clear body, 15ml

Homogeniser Tissue Type Reference Guide

Homogenisers	Suitable for Tissue Types
General Purpose	Brain, Lung, Spleen, Liver, Kidney
Potter-Elvehjem	Brain, Lung, Spleen, Liver, Kidney
Dounce	Brain, Lung, Spleen, Liver, Kidney
Mini Series	Heart, Muscle, Lung
Duo-Form	Muscle, Heart, Tissues
Griffiths Tubes	Brain, Lung, Spleen, Liver, Kidney
Safe Seal	Brain, Lung, Spleen, Liver, Kidney



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