

Extraction thimbles

The thimbles are widely used in Soxhlet extraction units, providing a safe, convenient, and efficient method of solvent extraction of solids and semi-solids. Soxhlet extraction is a widely used technique for the analysis of fats or pesticides in foods and soil materials as well as in many other procedures that involve a solid-liquid extraction.

Cellulose thimbles

High-performance cellulose thimbles

Cellulose extraction thimbles are produced from high-quality alpha cellulose cotton linter and have excellent mechanical strength and retention.

Standard single thickness thimbles have a wall thickness of approximately 1 mm (10.0 µm nominal particle retention).

Double thickness thimbles have a wall thickness of approximately 2 mm (6.0 µm nominal particle retention) for applications where higher retention and increased wet or dry strength, or rigidity are required.

The high purity of the materials ensures reliable and reproducible analytical results.

Standard cellulose thimbles

Thimbles of type 603 are made from high-quality cellulose and 603 g thimbles are made from borosilicate glass fibers with an inorganic binder. For all automated extraction apparatus in common use, we offer thimbles whose dimensions are matched exactly to those of the thimble holders to ensure optimal fit.



High Performance Cellulose Extraction Thimbles

Thimble size selection guide

Thimble sizes should be selected carefully to fit extractors correctly. The different sizes represent the established practice of showing the internal diameter and overall length of the thimble in millimeters. Therefore, an extra allowance for wall thickness should be made when calculating external diameters. The thimble should pass through the narrower end of the upper extractor socket, allowing 1-2 mm clearance, and be 5-10 mm above the level of the top of the siphon tube.

Typical properties—standard thimbles

Grade	Material	Maximum temperature °C
603	Cellulose	130
603 g	Borosilicate glass fibers*	500

* With inorganic binder

Ordering information—high-performance cellulose thimbles

Dimensions (mm)* †	Catalog number	Quantity/pack
Single thickness (nominal wall thickness = 1 mm)		
10 × 50	2800-105	25
18 × 55	2800-185	25
19 × 90	2800-199	25
22 × 65	2800-226	25
22 × 80	2800-228	25
25 × 80	2800-258	25
25 × 90	2800-259	25
25 × 100	2800-250	25
26 × 60	2800-266**	25
26 × 100	2800-260	25
28 × 80	2800-288	25
28 × 100	2800-280	25
28 × 120	2800-282	25
30 × 80	2800-308	25
30 × 100	2800-300	25
33 × 80	2800-338	25
33 × 94	2800-339	25
33 × 100	2800-330	25
33 × 118	2800-331	25
37 × 130	2800-373	25
41 × 123	2800-412	25
43 × 123	2800-432	25
60 × 180	2800-608#	25
Double thickness (nominal wall thickness = 2 mm)		
16 × 60	2810-166	25
22 × 80	2810-228	25
25 × 80	2810-258	25
26 × 60	2810-266	25
33 × 80	2810-338	25
33 × 94	2810-339	25
43 × 123	2810-432	25
90 × 200	2810-902	25

* Internal diameter and external length

** Fits Soxtec™ extractor

† See Thimble Size Selection Guide on p. 156

Nominal wall thickness 1.5 mm

Ordering information—standard cellulose thimbles

Dimensions (mm)*†	Grade	Wall thickness (mm)	Catalog number	Quantity/pack
22 × 60	603	2.0	10350306	25
22 × 80	603	1.5	10350211	25
25 × 60	603	1.5	10350215	25
25 × 80	603	1.5	10350217	25
25 × 100	603	1.5	10350219	25
26 × 60	603	1.5	10350220	25
27 × 25 × 60	603T	1.0	10350416	25
27 × 80	603	1.5	10350223	25
28 × 60	603	1.5	10350225	25
28 × 80	603	1.5	10350226	25
28 × 100	603	1.5	10350227	25
30 × 80	603	1.5	10350234	25
30 × 100	603	1.5	10350236	25
33 × 60	603	1.5	10350238	25
33 × 80	603	1.5	10350240	25
33 × 31 × 80	603T	1.0	10350437	25
33 × 90	603	1.5	10350241	25
33 × 94	603	1.5	10350242	25
33 × 100	603	1.5	10350243	25
33 × 118	603	1.5	10350245	25
33 × 130	603	1.5	10350247	25
33 × 205	603	1.5	10350250	25
34 × 130	603	1.5	10350252	25
35 × 150	603	1.5	10350255	25
40 × 85	603	2.0	10350261	25
41 × 123	603	2.0	10350265	25
44 × 230	603	2.0	10350275	25
48 × 145	603	2.0	10350273	25
48 × 200	603	2.0	10350274	25
75 × 250	603	2.5	10350287	25
80 × 250	603	3.0	10350324	25

* Internal diameter and external length

† See Thimble Size Selection Guide on p. 156

Ordering information—standard cellulose thimbles for DIONEX™ ASE

Extraction volume (mL)	Extraction system	Nominal wall thickness (mm)	Catalog number	Quantity/pack
11	200	1.0	10350106	25
22	200	1.0	10350108	25

Glass and quartz thimbles

High-purity glass microfiber thimbles

High-purity glass microfiber thimbles manufactured from 100% pure borosilicate glass are available for specialized applications. The thimbles are completely free of binders or additives and can be used at temperatures up to 500°C or when using solvents that are incompatible with cellulose thimbles. These thimbles are also used in pollution monitoring techniques (0.8 µm nominal particle retention). Typical thickness 1.7 mm.

Features and benefits

- Available in a range of sizes and wall thicknesses to suit your application
- Designed to fit most commercially available Soxhlet extractors
- No binders are added

Applications

- Smoke stack gas monitoring
- Soxhlet extraction
- Analyzing pesticide residues
- Determining oil/fat content of foods (e.g. french fries)
- Analysis of oil and grease in solid wastes



High-purity glass microfiber thimbles

Quartz microfiber thimbles

Made from high-purity quartz microfiber, this thimble is able to withstand high temperatures (up to 1000°C). Suitable for solvent extraction, dioxin detection and smoke stack gas sampling.

Standard glass fiber thimbles

Thimbles of type 603 g are made from borosilicate glass fibers with inorganic binder. There is also a selection of borosilicate glass thimbles without binder.

Ordering information—high-purity glass and quartz microfiber thimbles

Dimensions (mm)*	Catalog number	Quantity/pack
Glass microfiber thimbles—Grade HP-GF		
19 × 90	2814-199	25
25 × 90, tapered	2814-259	25
30 × 100	2814-300	25
43 × 123	2814-432	25
33 × 135	2814-533	25
Quartz microfiber thimbles		
25 × 90, tapered	2812-259	10
28 × 70, tapered	2812-287	10

* See Thimble Size Selection Guide on p. 156

Ordering information—standard glass microfiber thimbles

Dimensions (mm)*	Wall thickness (mm)	Catalog number	Quantity/pack
Grade 603 g (glass fiber with inorganic binder)			
10 × 38	1.0	10371103	25
16 × 50	1.0	10371005	25
19 × 90	1.0	10371007	25
22 × 80	1.5	10371011	25
23.8 × 68	1.5	10371114	25
25 × 100	1.5	10371019	25
28 × 60	1.5	10371025	25
30 × 100	1.5	10371036	25
33 × 94	1.5	10371042	25
33 × 100	1.5	10371043	25
33 × 118	1.5	10371045	25
35 × 150	1.5	10371055	25
44 × 230	1.5	10371075	25
Glass microfiber (without binder)			
30 × 80	–	2811-308	25

* Internal diameter and external length