



## Extraction Thimbles



Sartorius thimbles are available in a choice of three different grades and cover most applications. Cellulose or glass microfiber thimbles are primarily used in Soxhlet extraction units to extract defined substances from solids for further analyses. Quartz microfiber thimbles are preferred for emission control due to their high temperature resistance.

### Cellulose Thimbles

#### Description

Cellulose thimbles, grade 30, are made of 100% cotton linters with an alpha cellulose content of > 95%. They are manufactured in compliance with the German DIN 12449 standard to fit in Soxhlet devices according to the DIN 12602 and 12604 standards.

#### Applications

- Soxhlet extraction for determination of fats, lipids, additives or pesticides in the food industry
- Soxhlet extraction for determination of resin components in tar (road construction)
- Soxhlet extraction of oil and softeners
- Extraction of oil and lubricants in slurry and waste water
- Extraction of mineral oils in rocks
- Extraction of polychlorinated biphenyl (PCB) in soil and slurry, e.g. dioxin
- Extraction of monomeric components in plastic materials and rubber

### Glass Microfiber Thimbles

#### Description

Glass microfiber thimbles, grade 40, are made of 100% borosilicate glass fibers and are binder-free. The thimbles are biologically inert, do not swell, are pH-stable and have a high chemical compatibility.

#### Applications

- Separation of particulate dust or aerosols from gas or other airstreams
- Emission testing at high temperature

### Quartz Microfiber Thimbles

#### Description

Quartz microfiber thimbles, grade MK 360, are made of 100% high purity quartz microfibers, and meet the highest requirements for purity, especially because of their low heavy metal content.

#### Applications

- Analysis of hot and acidic gases
- Trace element analysis
- Air sampling
- Monitoring of exhaust fumes

## Specifications

Tolerances	Cellulose	Glass microfiber	Quartz microfiber	Inner diameters			
Inner diameter in mm*	+0 -3	+1 -3	+0 -3	9 mm**	26 mm	37 mm**	58 mm**
Outer length in mm*	± 1	± 1	± 1	10 mm	27 mm	40 mm	60 mm**
Wall thickness in mm*	1.5 ± 0.5	2 ± 0.5	2 ± 0.5	16 mm	28 mm	43 mm	68 mm**
Penetration % (0.3 micron)		< 0.002	< 0.002	19 mm	29 mm	44 mm	70 mm**
Max. temperature resistance	120°C	500°C	900°C	20 mm**	30 mm	48 mm	75 mm**
				22 mm	33 mm	53 mm	90 mm
				23 mm	34 mm	55 mm**	
				25 mm	35 mm	57 mm**	

\* According to the German DIN standard 12449, the tolerances of the inner diameter, the length and the wall thickness depend from the size of the extraction thimble. The tolerances above are for thimbles with an inner diameter < 48 mm.

\*\* Available in cellulose only. All diameters are available in quantities of 25 units per box. Other diameters and custom sizes are available upon request.

Typical trace element values for glass and quartz microfiber thimbles in mg/kg

	As	Cd	Co	Cr	Cu	Mg	Mn	Ni	Pb	Sr	Ti	V	Zn
Glass microfiber thimbles	3.0	< 0.01	0.36	3.2	2	14,750	6.9	0.8	6.5	62	104	0.8	230
Quartz microfiber thimbles	< 0.1	< 0.01	< 0.1	3.3	0.5	5.0	1.5	1.4	0.2	1.3	7.5	< 0.1	12

## Examples of use of extraction thimbles

Extraction thimbles according to the standard DIN 12449.

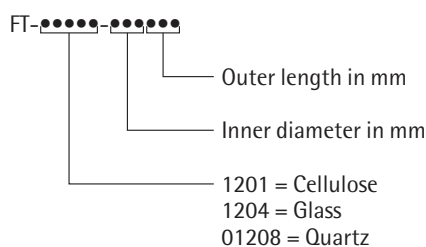
For Soxhlet devices (DIN 12602 and 12604)

Fitting extractors with a nominal volume in ml	Inner diameter	Outer length
30 ml	22 mm	80 mm
100 ml	33 mm	94 mm
250 ml	33 mm	205 mm
500 ml	48 mm	230 mm
1000 ml	57 mm	315 mm

For automatic extraction systems (DIN 12602 and 12604)

Extraction system	Inner diameter	Outer length
Büchi Extraction System B-811	22 mm	80 mm
	25 mm	100 mm
	33 mm	94 mm
	43 mm	123 mm
Gerhardt Soxtherm Automatic	33 mm	80 mm
Foss-Tecator Soxtec Avanti 2050	33 mm	80 mm

## Ordering information



Example: FT-1201-033080

1201= Cellulose

033 = 33 mm inner diameter

080 = 80 mm outer length

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