

**Microtiter®
Microplates**



**30 Years Experience of
Microplate Technology**

Analyze • Detect • Measure • Control™

Thermo
ELECTRON CORPORATION

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Microtiter Microplates

Thermo has expanded its range of Microtiter microplates to provide an array of products designed to match the demanding requirements of biotechnology, life science and pharmaceutical research laboratories.

Consistent quality for consistent results

Thermo has great experience in the fields of microplate instrumentation, liquid handling, in vitro diagnostics and plastic molding processes. This heritage, combined with rigorous quality control, guarantees the highest quality products, with unrivalled consistency well to well, plate to plate and lot to lot.

Array of plates for exact assay results

Microtiter microplates are available in 96- and 384-well formats with different binding characteristics, including Streptavidin coated surfaces. Black and white Microtiter microplates are designed for use with light emitting markers. Carefully selected pigments optimize assay performance with well-to-well crosstalk elimination and

background reduction properties.

Advanced features and careful design ensure the reliability of Microtiter[®] microplates. Coating and washing are always even, and the recessed bottoms keep the surfaces clean and scratch free ensuring high optical performance.

Simplifying your work

Unsure about which Microtiter microplate will work best for your application? We offer a variety of binding characteristics, well shapes, volumes and configurations; and we can assist you with the selection of the correct Microtiter microplates for your work. We are committed to simplifying this process. Contact our local office or representative. One of our Microtiter microplate specialists will work with you to identify several product options, then arrange to have samples sent to you, free of charge.

- **Rigorous quality control - for unrivalled consistency**
- **Microtiter microplates compatible with all standard instrumentation**
- **Experience in microplate instrumentation**
- **Expertise in plastic molding processes**
- **Customized products for your requirements**



Immunoassay Products

High quality binding surfaces

Thermo's variety of Microtiter® products permits selection of the optimum binding characteristics and microplate formulations for immunoassays. Thermo's Microtiter products have binding characteristics that include Immulon® and universal/enhanced binding. These make good experimental design easier, allowing development of assays with stringent pH, buffer, pKa and resin requirements.

Medium binding surfaces

Binding capacity 100-200 ng IgG/cm²

Immulon 1 B consistent medium binding affinity for hydrophobic complexes and proteins.

Universal Binding (UB) consistent medium binding affinity for hydrophobic complexes and proteins.

High binding surfaces

Binding capacity 400-500 ng IgG/cm²

Immulon 2 HB high binding irradiated surface to provide increased binding affinity for hydrophilic proteins and complexes.

Immulon 4 HBX high binding extra surface with special resin and irradiation, offers maximum protein uptake.

Enhanced Binding (EB) high binding irradiated surface to provide increased binding affinity for hydrophilic proteins and complexes. Guaranteed coefficient of variation (CVs).

Four choices of well shapes

Well shapes can be chosen to best suit your applications.

Flat bottom works well for reagent injection while providing the optimal optical characteristics.

U-bottom improves washing in ELISAs, enhances sensitivity in fluorescent applications and facilitates observation of agglutination reactions.

Round-bottom enhances washing in ELISAs while retaining high-quality optical characteristics.

Immulon well bottom options:



Volume=0,33ml

Area=2,37cm²

Flat bottom



Volume=0,28ml

Area=1,89cm²

U-bottom



Volume=0,33ml

Area=2,65cm²

Flat bottom

2x8 strip



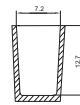
Volume=0,38ml

Area=2,62cm²

Flat bottom

1x12 strip

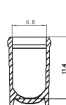
Universal and enhanced binding well bottom options:



Volume=0,45ml

Area=3,24cm²

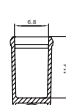
Flat bottom



Volume=0,35ml

Area=2,40cm²

Round bottom strip



Volume=0,40ml

Area=2,76cm²

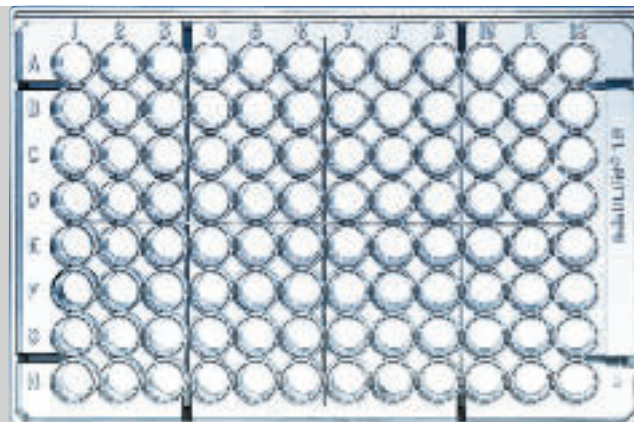
Flat bottom strip with radius edge

• Molecules for medium binding surfaces

- Polyclonal antibodies
- Proteins
- Immunoglobulins
- Lipids
- Lipoproteins
- Lipopolysaccharides

• Molecules for high binding surfaces

- Monoclonal and polyclonal antibodies
- Proteins
- Peptides
- Polysaccharides
- Glycoproteins
- Immunoglobulins
- Lipoproteins
- Glycopeptides
- Purified antigens



Highly flexible Microtiter microplate configurations

Thermo's Immulon® and universal/enhanced binding Microtiter® microplates are available in 96-well and strip plate format, allowing you

to match them perfectly to your automated instruments. Microtiter microplates with breakable strips offer maximum efficiency for processing both large and small numbers of samples, as the exact number of wells required can be used.

The break-apart wells have a unique well locking system that keeps the wells and your samples securely in place. Strips come in 1x8 and 1x12 break-apart or solid strip format with paired 2x8 strips also available.

Immulon Microtiter Microplates, 96-Well

Cat. no.	Bottom	Description	Qty/Bag	Qty/Box
3355	Flat	1 B, Medium Binding	10	50
3555	U	1 B, Medium Binding	10	50
3455	Flat	2 HB, High Binding	10	50
3655	U	2 HB, High Binding	10	50
3855	Flat	4 HBX, High Binding Extra	10	50

Microtiter Microplates, 96-Well

Cat. no.	Bottom	Description	Qty/Bag	Qty/Box
9502227	Flat	Universal Binding	25	50
95 029 330	Flat	Enhanced Binding	25	50
95 029 780	Flat	Universal Binding, Sterile + Lid	1	40

Immulon Strip Plates

Cat. no.	Bottom	Description	Strip	Qty/Bag	Qty/Box
6310	Flat	1 B, Medium Binding	1x12	100	100
6505	Flat	1 B, Medium Binding	2x8	25	100
6309	Flat	2 HB, High Binding	1x12	100	100
6506	Flat	2 HB, High Binding	2x8	25	100
6405	Flat	4 HBX, High Binding Extra	1x12	100	100
6508	Flat	4 HBX, High Binding Extra	2x8	25	100

Immulon Strips

Cat. no.	Bottom	Description	Strip	Qty/Bag	Qty/Box
6301	Flat	1 B, Medium Binding	1x12	320	320
6302	Flat	2 HB, High Binding	1x12	320	320
6404	Flat	4 HBX, High Binding Extra	1x12	320	320

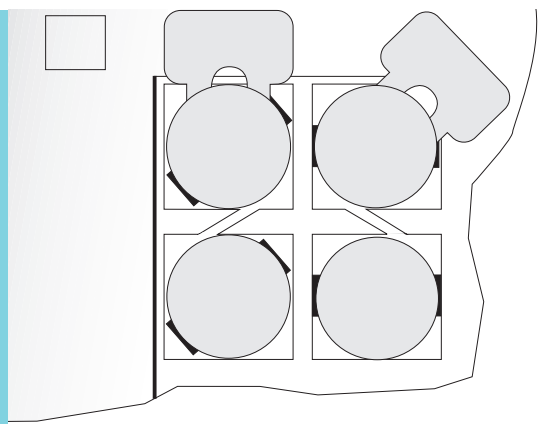
Microtiter Breakable Strip Plates

Cat. no.	Bottom	Description	Strip	Qty/Bag	Qty/Box
95 029 390	Flat	Universal Binding	1x8	25	50
95 029 180	Flat	Enhanced Binding	1x8	25	50
95 029 430 *	Round	Universal Binding	1x8	5	50

Microtiter Solid Strip Plates

Cat. no.	Bottom	Description	Strip	Qty/Bag	Qty/Box
95 029 350	Flat	Universal Binding	1x8	25	50
95 029 100	Flat	Enhanced Binding	1x8	5	50
95 029 440 *	Round	Universal Binding	1x8	5	50

* 100 box minimum order



A patented locking system keeps wells firmly in place during shaking or inverting. To lock, wells are turned slightly after insertion in the frame.

- Five binding surfaces
- Individually wrapped sterile Microtiter microplates with lids
- Immulon strip configurations
 - 1x12 strip
 - 2x8 strip
- Unique breakable well locking system

Luminescence Application Products

Thermo offers a selection of Microtiter® microplates specifically designed for luminescence applications. Microlite™ and white universal/enhanced binding Microtiter microplates are very densely pigmented to minimize cross talk and to provide high reflectivity. These characteristics are ideal for very intense luminescent reactions where light piping may be a concern or minimal luminescence assays where even a minute amount of light could affect your results.

Wide range of binding characteristics

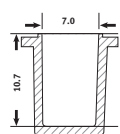
Microlite 1+ is the ideal vessel for low signal luminescent reactions, offering medium binding with enhanced dynamic range, extra high reflectivity and minimal cross talk.

Microlite 2+ is an irradiated, high binding surface with enhanced dynamic range, extra high reflectivity and minimal cross talk for low signal luminescent reactions.

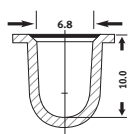
Microlite TCT microplate is a 96-well sterile Microtiter microplate for luminescent tissue culture assays.

White Universal Binding (UB) luminescence vessel provides high reflectivity, medium binding and low cross talk. Minimum phosphorescence background increase sensitivity of luminescence assays.

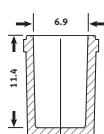
Microlite and Microlite+ well bottom options:



Volume=0,33ml
Area=2,37cm²
Flat bottom

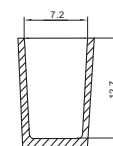


Volume=0,28ml
Area=1,89cm²
U-bottom

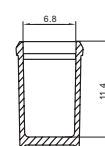


Volume=0,38ml
Area=2,62cm²
Flat bottom
1x12 strip

White universal binding well bottom options:



Volume=0,45ml
Area=3,24cm²
Flat bottom



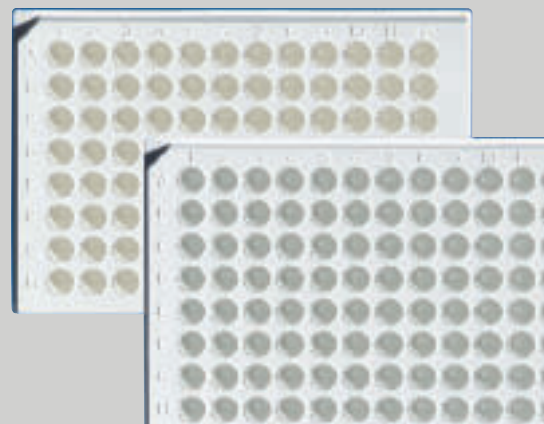
Volume=0,40ml
Area=2,76cm²
Flat bottom strip
with radius edge

- **Microlite+ surface**

- Minimum cross talk
- Extra high reflectivity

- **White Universal binding surface**

- Low cross talk
- High reflectivity
- Minimum background phosphorescence



Highly flexible Microtiter microplate configurations

Thermo's Microlite™+ and universal binding products are available in 96-well and strip plate format, with several choices of well shape. The strips can be provided in break-apart or solid strip format and the break-apart wells have a unique well locking system that keeps the wells and your samples securely in place.

Microlite+ Microtiter Microplates, 96-Well

Cat. no.	Bottom	Description	Qty/Bag	Qty/Box
7418	Flat	Microlite TCT , sterile	10	50
7571	Flat	Microlite 1 +	10	50
7572	Flat	Microlite 2 +	10	50

White Microtiter Microplates, 96-Well

Cat. no.	Bottom	Description	Qty/Bag	Qty/Box
9502887	Flat	Universal Binding	25	50
95 029 770	Flat	Universal Binding, Sterile + Lid	1	40

Microlite+ Strips

Cat. no.	Bottom	Description	Strip	Qty/Bag	Qty/Box
7566	Flat	Microlite 1+ Strip	1x12	320	320
7567	Flat	Microlite 2+ Strip	1x12	320	320

Microlite+ Strips Plates

Cat. no.	Bottom	Description	Strip	Qty/Bag	Qty/Box
7561	Flat	Microlite 1+ Assembly	1x12	100	100
7562	Flat	Microlite 2+ Assembly	1x12	100	100

White Microtiter Breakable Strip Plates

Cat. no.	Bottom	Description	Strip	Qty/Bag	Qty/Box
95 029 660	Flat	Universal Binding	1x8	25	50

White Microtiter Solid Strip Plates

Cat. no.	Bottom	Description	Strip	Qty/Bag	Qty/Box
95 029 510	Flat	Universal Binding	1x8	25	50



- Microlite tissue culture treated microplate
- Individually wrapped white sterile Microtiter microplate + lid
- Microlite 1+
 - Medium binding surface
- Microlite 2+
 - High binding surface

Fluorescence Application Products

Microtiter microplates and universal/enhanced binding Microtiter microplates are designed specifically for fluorescence applications and are available with either black or white pigmentation, depending on your specific assay requirements.

Black Microtiter microplates with reduced background

Black Microtiter microplates have reduced background signal to improve assay sensitivity with minimized cross talk while avoiding light piping between wells. They are available in high and medium binding configurations.

Microfluor 1 Black is a fluorescence

vessel that offers low background.

Microfluor 2 Black is an irradiated Microtiter microplate that provides higher binding and minimal background fluorescence.

Black Universal Binding is a fluorescence vessel that offers low background.

Black Enhanced Binding is an irradiated Microtiter microplate that provides higher binding and minimal background fluorescence.

White Microtiter microplates for enhanced reflectivity

White Microtiter microplates have higher reflectivity to enhance signal

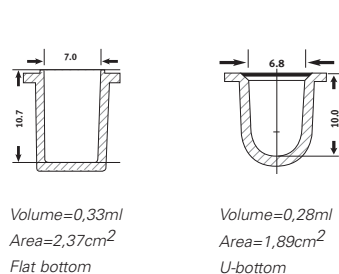
and thus sensitivity, while improving signal to noise ratios, increasing the dynamic range and minimizing cross talk. White Microtiter microplates are available in high and medium binding configurations.

Microfluor 1 White is a vessel that offers high signal reflectance and reduced background fluorescence.

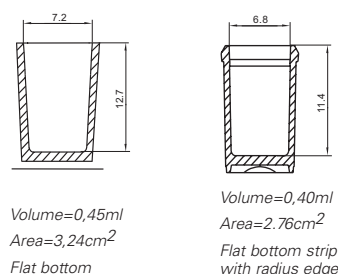
Microfluor 2 White is an irradiated Microtiter microplate for assays that require higher binding and reduced background for fluorescence assays in the ultraviolet range.

White Universal Binding vessel offers high signal reflectance and reduced background fluorescence.

Microfluor well bottom options:

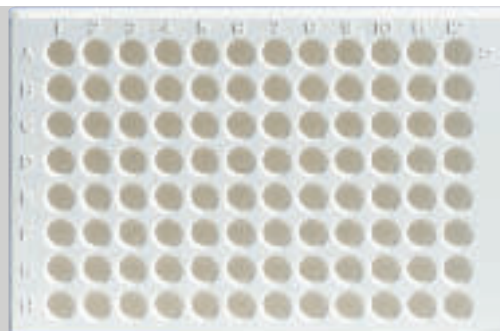


Universal and enhanced binding well bottom options:



• Black

- Minimum background



• White

- Maximum reflection

Flexible Microtiter microplate formats

Thermo's Microfluor® and enhanced/universal binding products are available in 96-well and

strip-plate format. The 96-well Microtiter microplates have raised wells to avoid cross contamination. Microfluor and enhanced/universal binding strips can be provided assembled or separately in 1x8 or

1x12 solid strip format. The 1x8 break-apart wells have a unique well locking system that keeps the wells and your samples securely in place.

Microfluor Microtiter Microplates, 96-Well

Cat. no.	Bottom	Description	Qty/Bag	Qty/Box
7605	Flat	Microfluor 1 Black Plate	10	50
7005	U	Microfluor 1 Black Plate	10	50
7805	Flat	Microfluor 2 Black Plate	10	50
7205	U	Microfluor 2 Black Plate	10	50
7705	Flat	Microfluor 1 White Plate	10	50
6905	U	Microfluor 1 White Plate	10	50
7905	Flat	Microfluor 2 White Plate	10	50
7105	U	Microfluor 2 White Plate	10	50

Black Microtiter Microplates 96-Well

Cat. no.	Bottom	Description	Qty/Bag	Qty/Box
9502867	Flat	Universal Binding	25	50
95 029 840 *	Flat	Universal Binding, Sterile + Lid	1	40

White Microtiter Microplates 96-Well

Cat. no.	Bottom	Description	Qty/Bag	Qty/Box
9502887	Flat	Universal Binding	25	50
95 029 770	Flat	Universal Binding, Sterile + Lid	1	40

Black and White Microtiter Microplates Solid Strip Plates

Cat. no.	Bottom	Description	Strip	Qty/Bag	Qty/Box
95 029 450	Flat	Universal Binding, Black	1x8	25	50
95 029 490*	Flat	Enhanced Binding, Black	1x8	5	50
95 029 510	Flat	Universal Binding, White	1x8	25	50

Black and White Microtiter Microplates Breakable Strip Plates

Cat. no.	Bottom	Description	Strip	Qty/Bag	Qty/Box
95 029 800*	Flat	Universal Binding, Black	1x8	25	50
95 029 660	Flat	Universal Binding, White	1x8	25	50

* 100 box minimum order

• Flexible Microtiter microplate formats

• Microfluor Microtiter microplates

- Black and white
- U- and Flat -bottom well shapes

• Microfluor 1

- Medium binding surface

• Microfluor 2

- High binding surface

• Individually wrapped black sterile Microtiter microplate with lid

384-Well Microtiter Microplates

Thermo's wide range of 384-well Microtiter microplates is ideal for high-throughput screening and research. 384-well Microtiter microplates allow miniaturization of assays and many other applications, including high volume DNA library manipulation and solid phase binding assays.

Because your choice of analytical technique is dependent on the assays you run, Thermo provides

clear Microtiter microplates for colorimetric applications, white plates for luminometric/fluorometric applications, and black Microtiter microplates for fluorometric applications.

Thermo supplies 384-well Microtiter microplates with two different designs, which both have flat bottom wells and a standard microplate footprint. The first type of Microtiter microplate has a square

well shape with rounded corners for an increased well volume. It has the standard microplate height and a total well volume of 120 μ l. The second type of Microtiter microplate has round wells and a lowered profile, with a total well volume of 70 μ l. Both well shapes decrease the risk of well-to-well cross contamination.

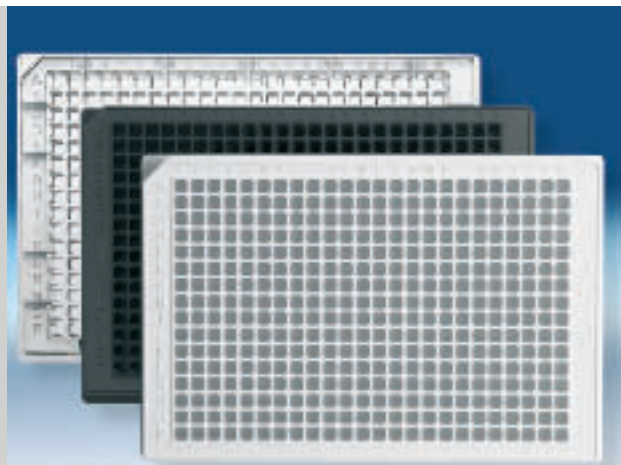
384 Square Well Microtiter Microplates

Cat. no.	Well Shape	Description	Well Volume/ μ l	Qty/Bag	Qty/Box
8555	Rounded Square	Immulon 1 B Plate	120	10	50
8755	Rounded Square	Immulon 4 HBX Plate	120	10	50
8155	Rounded Square	White Microlite 1 Plate	120	10	50
8255	Rounded Square	Black Microfluor 1 Plate	120	10	50

384 Well Microtiter Microplates

Cat. no.	Well Shape	Description	Well Volume/ μ l	Qty/Bag	Qty/Box
95040000	Round	384 Plate	70	5	50
95040010	Round	White 384 plate	70	5	50
95040020	Round	Black 384 plate	70	5	50
95040130	Round	384 Plate Sterile with lid	70	1	40
95040230*	Round	White 384 Plate Sterile with lid	70	1	40
95040330*	Round	Black 384 Plate Sterile with lid	70	1	40

*100 box minimum order



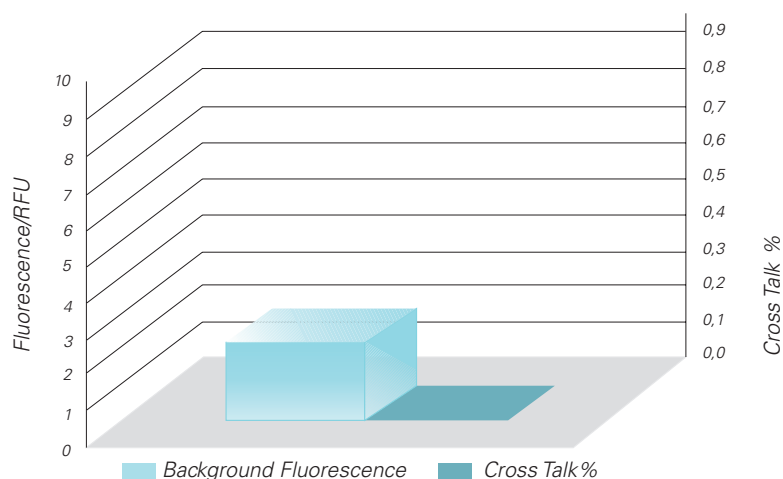
- High-throughput screening
- Assay miniaturization
- Standard footprint
- Well shape: rounded square or round
- Flat bottom well
- Well volume 70/120 μ l

Clear Bottom Microtiter Microplates

These Microtiter microplates offer a great choice for combining direct microscopic observation with other means of detection, for example fluorescence, without having to transfer the cells from the culture plate to another. The Tissue Culture

treated surface together with sterility enables cell based studies by facilitating cell growth. The unique format with 96 individual clear wells in an opaque plate matrix helps to minimize cross talk, and this Microtiter microplate also has

low background. Having a standard microplate footprint, these clear bottom Microtiter microplates can be used with any standard microplate handling or measuring device. Applications include, for example, cell proliferation, apoptosis, microbial growth and cytotoxicity.



Background Fluorescence ex 355/em 460 nm and Cross Talk % for Clear Bottom Microtiter microplates

Clear Bottom Microtiter Microplates

Cat. no.	Bottom	Description	Qty/Bag	Qty/Box
8220	Flat	Black Clear Bottom Sterile TC Treated + lid	1	100
8120	Flat	White Clear Bottom Sterile TC Treated + lid	1	100



- Individually wrapped Clear bottom microplate + lid
- Sterile tissue culture treated surface

Coated Microtiter Microplates

BioBind™ -Streptavidin Coated Microtiter microPlates

Streptavidin-coated Microtiter microplates offer a universal surface for binding a wide range of molecules.

Strong, stable interactions

The biotin-streptavidin interaction is extremely strong, allowing simple and stable binding of DNA, peptides, polysaccharides and other biotin conjugates to the polystyrene well surface. This prevents the problems associated with steric hindrance and hydrophilic molecules.

Highly specific binding

Streptavidin coating is ideal for use with molecules that adsorb poorly to polystyrene or denature upon adsorption, as it gives stable, highly specific binding with low background binding. BioBind plates are available in black and white versions for assays utilizing luminescent or fluorescent markers.

Technical characteristics

- Coated well area is 200 μ l
- Binding capacity determined by FITC-biotin binding test is according to specifications \geq 12 pmol of FITC-biotin bound per well
- Storage at +4°C to +8°C
- Preblocked and ready to use

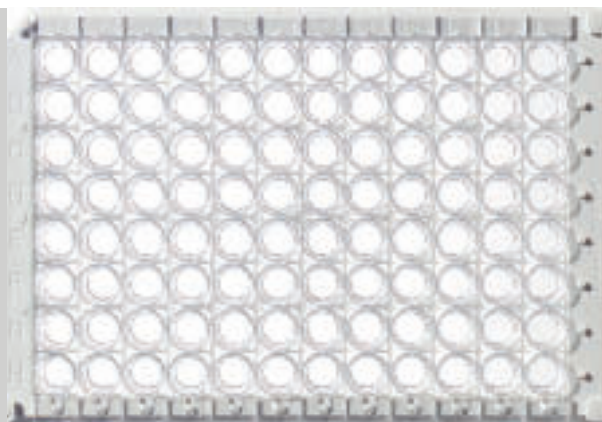
Shelf life:

- Clear plates: 24 months
- White plates: 26 months
- Black Plates: 29 months

Ordering Information

Streptavidin-Coated Microtiter Microplates

Cat. no.	Bottom	Description	Strip	Qty/Bag	Qty/Box
95029263	Flat	BioBind Strip Assembled	Solid 1x8	1	5
95029293	Flat	BioBind Strip Assembled	Breakable 1x8	1	5
95029273	Flat	White BioBind Strip Assembled	Solid 1x8	1	5
95029283	Flat	Black BioBind Strip Assembled	Solid 1x8	1	5



- **Strong, stable interactions**
- **Highly specific binding**
- **Binding Applications**
 - Proteins
 - Peptides
 - Polysaccharides
 - DNA hybridization

Other Assay Microtiter Microplates

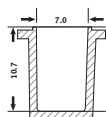
Thermo manufactures a range of liquid handling products from rigid styrene and also from flexible vinyl.

These products are ideal for micro-volume applications such as storage, sample or reagent transfer,

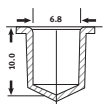
serial dilution, hemagglutination, blood typing and complement fixation.

Three choices of well shapes

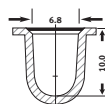
The shapes of well bottoms can be chosen to best suit your applications.



Volume=0,33ml
Area=2,37cm²
Flat bottom
Styrene



Volume=0,28ml
Area=1.87cm²
V-bottom
Styrene



Volume=0,40ml
Area=2.76cm²
U-bottom
Styrene

Flat Provides optimal optical characteristics and works well for reagent injection.

V Optimal for magnetic bead assays, ideal for agglutination tests, useful for centrifugation or concentration, and facilitates recovery of contents.

U Improves washing in ELISAs, enhances sensitivity in fluorescent applications and facilitates observation of agglutination reactions.

Liquid Handling Microtiter Microplates

Cat. no.	Bottom	Description	Qty/Bag	Qty/Box
2205	U	Styrene 96-well Plate	10	50
2605	V	Styrene 96-well Plate	10	50
9205	Flat	Styrene 96-well Plate	10	50
2101	U	Vinyl Alpha Numeric Plate	25	100
2401	U	Vinyl Unmarked Plate	25	100
2601	V	Vinyl Unmarked Plate	25	100
2801	Flat	Vinyl Unmarked Plate	25	100

• Vinyl Microtiter microplate Applications

- Complement fixation
- Agglutination
- Blood typing

• Styrene Microtiter microplate Applications

- Complement fixation
- Agglutination
- Microbiology testing
- Blood typing

New

Microtiter Polypropylene Microplates

Thermo Microtiter polypropylene microplates are ideal for sample collection, storage, combinatorial chemistry and library application. These polypropylene plates conform to the recommendations of Society of Biomolecular Screening (SBS) for footprint dimensions.

Thermo Microtiter polypropylene microplates are made from virgin grade polypropylene. They are biologically inert and have high resistance to organic solvents including DMSO. The high temperature resistant from -196 to +121 °C enables storing in ultra low temperature freezers and autoclaving (at 121°C, 1 atm, 20 min). Thermo polypropylene plates have V shape bottom and well

volume of 0,5 ml with standard height plate and well volume of 2 ml with deep well plate. The deep well plate is sealable with cap mat lid and they are available with sterile versions. Thermo polypropylene plates are compatible with automated liquid handling instruments.



Cat. no.	Description	Qty/Bag	Qty/Box
95040450	Deep Well 96 plate, V-bottom, Polypropylene	5	50
95040460	Deep Well 96 plate, V-bottom, Polypropylene, Sterile	1	50
95040410	96 Well Plate, Polypropylene	25	50
9503230	Cap mat for DW 96 Plate	5	50
9503233	Cap mat for DW 96 Plate, Sterile	1	25

Sample tubes and racks

Thermo supplies 1.1 ml sample tubes, 96-position tube racks and cap bands in strips of eight. The tubes can be used to prepare a large sample volume for subsequent transfer to Microtiter microplates. The 96-position tube racks

are suitable for use with multichannel pipettes, since the wells have the same 9 mm spacing as standard plates.

The pre-dilution tubes are made of polypropylene, and they are autoclavable for sterile applications.

Cat. no.	Description	Quantity
9520 130	Test tube, 1.1 ml	1000/bag
9520 557	Cap band	75/box
9520 770	Tube rack for 96 tubes	10/box

Polypropylene plates

- Well volumes 0,5 ml or 2 ml
- V-shape bottom
- Biological inertness
- High resistance to organic solvents (DMSO etc.)
- High temperature resistance (-196 to +121°C)
- Autoclavable +121°C, 20 min

Special features of deep well plate

- Deep Well 96 Plate is specially designed for King Fisher 96 purification applications
- Unique V bottom well design improves yield and quality in King Fisher 96 process
- DW plate sealable with storage cap mat

Microtiter Microplate Accessories

To keep samples free from contamination during liquid handling, assays, tests, and reactions, four different polystyrene lids can be provided for Microtiter microplates.

Keep your samples clean

For extra cleanliness, sterile, individually wrapped lids can be provided. For storage and other applications that require plates to be sealed, Cellulose-acetate, Mylar (PET) and PVC Microtiter microplate Sealers are available for use over a range of temperatures between -46°C and +135°C.

• Temperature ranges for Plate Sealers:

- Acetate -32°C to 93°C
- Mylar (PET) -46°C to 135°C
- PVC -30°C to 80°C

Microtiter Microplate Accessories

Cat. no.	Sterile	Description	Qty/Bag	Qty/Box
5500 ¹⁾	Yes	Universal Polystyrene Lid, Sterile	50	100
5550 ¹⁾	Yes	Sterile Styrene Individually Wrapped Lid	1	50
9503210 ²⁾	No	Microplate Lid, 96-well	15	15
9503220 ²⁾	No	Microplate Lid	15	15
6305	No	Vinyl Lid for 1x12 strip assembly	25	100
5701	No	Mylar Plate Sealers	100	100
3501	No	Acetate Plate Sealers	100	100
9503130	No	PVC Sealing Tape	100	100
6604 ¹⁾	No	Holder for 1x12 strip assembly	10	10
6000 ¹⁾	No	Workstation 1x12 strip assembly	1	1
9503060 ²⁾	No	Multiframe	5	5
9503110 ²⁾	No	Strip Removal Tool	25	25
9503140	No	Microplate Sample Pack	1	1

¹⁾ Accessories for 4-digit -products

²⁾ Accessories for ex-Labsystems products

Microbiological Application Products

Thermo offers a range of polystyrene products and accessories to support microbiological applica-

tions in a Microtiter microplate format. These products are suitable for applications including bacterial growth, bacterial identification,

minimum inhibitory concentration (MIC), hybridization, hybridoma plating and cloning.

Microbiological Application Products

Cat. no.	Sterile	Description	Qty/Bag	Qty/Box
0151	Yes	MIC 2000 Microtiter microplate, U-bottom	25	100
0350	Yes	Single Inoculum Tray	25	50
0050	Yes	Disposable Inoculator Assembly with Single Inoculum Tray	5	50



OEM Microtiter Microplates – For the Specific Needs of Your Assays

Whether your needs are large or small, Thermo will work with you to ensure that the products and services we provide meet your requirements on time, every time. Our goal is to work with our OEM partners to ensure optimum reliability and availability of our Microtiter products, for mutual success.

OEM Capabilities

We offer the following categories of customized Microtiter microplates.

1. Applies to all of our standard products:

- Special packaging and labeling
- Color coding of wells or frames
- Company logos or brand name inserts

Minimum ordering quantity 10 000 plates

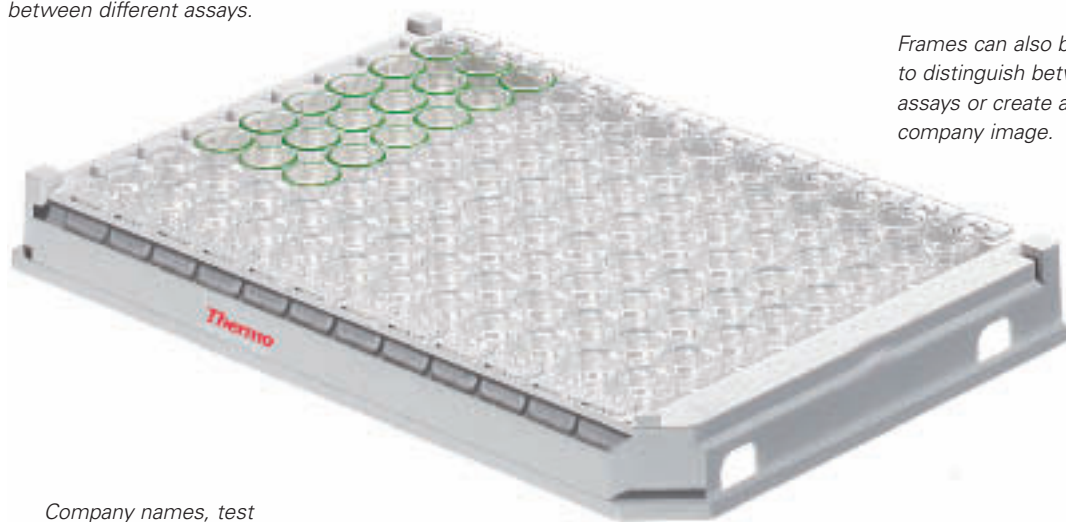
Your local OEM representative can assist you with sample testing and lot reservations.

2. Specifically designed products to meet your needs:

- Tool design and manufacturing
- Production start-up
- Applications specific

Go to source: www.thermo.com/microtiter

Color-coded wells help distinguish between different assays.



Frames can also be color coded to distinguish between different assays or create a customized company image.

Company names, test names, etc. can be printed on the frame.

Modified 'branded' frames are available for different types of instrumentation.

- Color coded wells
- Color coded frames
- Customized printing
- Modified frames

Chemical Compatibility of Plastics

These are general guidelines, not performance guarantees. Factors such as concentration, temperature and length of exposure can affect performance.

Chemical Class	Polypropylene (PP)	Polystyrene (PS)	Chemical Class	Polypropylene (PP)	Polystyrene (PS)
Acid, mineral			Amide		
Boric acid	Good	Good	Dimethylformamide	Good	Poor
Hydrogen chloride 20%	Good	Good	Amine		
Hydrogen chloride 25%	Good	Fair	Pyridine	Good	Poor
Nitric acid 70%	Fair	Poor	Aromatic hydrocarbon		
Perchloric acid	Fair	Good	Benzene	Poor	Poor
Phosphoric acid 1%	Good	Good	Toluene	Poor	Poor
Phosphoric acid 10%	Good	Good	Base		
Sulphuric acid 50%	Good	Good	Ammonia concentrate	Good	Good
Sulphuric acid 98%	Poor	Poor	Sodium hydroxide 10%	Good	Good
Acid, organic			Ester		
Acetic anhydride	Fair	Poor	Dibutyl phthalate	Fair	Poor
Formic acid concentrate	Good	Fair	Diethyl ether	Fair	Poor
Lactic acid	Good	Good	Propylene oxide	Good	Poor
Palmitic acid	Good	Good	Halogenated hydrocarbon		
Salicylic acid	Good	Good	Carbon tetrachloride	Fair	Poor
Tannic acid	Good	Good	Chlorobenzene	Poor	Poor
Alcohol			Chloroform	Fair	Poor
Allyl alcohol	Good	Good	Dichloroethane	Fair	Poor
Amyl alcohol	Good	Good	Ketone		
Ethanol	Good	Good	Acetone	Fair	Poor
Ethylene glycol 60%	Good	Good	Methyl ethyl ketone	Good	Poor
Ethylene glycol 100%	Good	Good	Phenol		
Glycerol	Good	Good	Phenol	Fair	Poor
Isobutanol	Good	Good	Salt, inorganic		
Methanol	Good	Poor	Potassium carbonate	Good	Good
Aldehyde			Silver nitrate	Good	Fair
Acetaldehyde	Good	Poor	Sodium hypochlorite 5%	Fair	Good
Formaldehyde 37%	Good	Good	Miscellaneous		
Aliphatic hydrocarbon			DMSO	Good	Good
Heptane	Fair	Poor	Urea	Good	Good
Hexane	Fair	Poor			

Physical Properties of Plastics

Physical Properties of Plastics		
Basic properties	Polypropylene	Polystyrene
General features	Biologically inert, high chemical resistance exceptional toughness	Biologically inert, hard, excellent optical properties
Clarity	Translucent	Clear
Flexibility	Rigid	Rigid
Heat distortion temperature(°C)	135	64-80
Specific gravity	0.903	1,05
Sterilization		
Autoclaving 121°C 20 min	Yes	No
Dry heat sterilization at 160°C	No	No
Radiation sterilization	Yes	Yes
Gas sterilization, ethylene oxide	Yes	Yes
Disinfectants	Yes	Some

Microplates – Detection instrument compatibility guide



Microplates – Detection instrument compatibility guide

Clear plates for absorbance readers


Instruments	Wells	Cat. no.	Description	Characteristics	Binding affinity	Examples of applications
Multiskan Ascent, Multiskan Spectrum, Varioskan, Appliskan	96	3355	1B, Medium Binding	hydrophobic	peptide, polypeptide, lipoproteins	ELISA
	96	3855	4 HBX, High Binding Extra	hydrophilic/charged	DNA, proteins	Streptavidin-biotin, ELISA, Fibroblast Migration Assay
	384	8555	1B, Medium Binding – square to round wells	hydrophobic	peptide, polypeptide, lipoproteins	HTS, ELISA, Kinase assay, Streptavidin-biotin, Sandwich ELISA
	384	8755	4HBX, Extra-high Binding – square to round wells	hydrophilic/charged	DNA, proteins	HTS, ELISA, Kinase assay, Streptavidin-biotin, Sandwich ELISA
	96	9502227	Universal Binding	hydrophobic	protein	ELISA
	96	95029330	Enhanced Binding	hydrophilic/charged	glycoproteins and high affinity for monoclonal antibodies	Sandwich ELISA, Competitive ELISA, IgG titer levels, Kinase assays
	96	95029780	Universal Binding, Sterile with Lid	hydrophobic	protein binding – cell applications	Cell fusion
	96	6310	1B 1 x 12 Medium Binding Strip assembly	hydrophobic	peptide, polypeptide, lipoproteins	ELISA
	96	6505	1B 2 x 8 Medium Binding Strip assembly	hydrophobic	peptide, polypeptide, lipoproteins	ELISA
	96	6405	4 HBX 1 x 12 High Binding Extra Strip assembly	hydrophilic/charged	DNA, proteins	Streptavidin-biotin, ELISA, Fibroblast Migration Assay
	96	6508	4 HBX 2 x 8 High Binding Extra Strip assembly	hydrophilic/charged	DNA, proteins	Streptavidin-biotin, ELISA, Fibroblast Migration Assay

White plates for luminescence readers

Instruments	Wells	Cat. no.	Description	Characteristics	Binding affinity	Examples of applications
Luminoskan Ascent, Fluoroskan Ascent FL, Appliskan	96	7571	Microlite 1+ Plate	hydrophobic	protein	Chemiluminescent and bioluminescent assays
	96	7572	Microlite 2+ Plate	hydrophobic	peptide, polypeptide, lipoproteins	Chemiluminescent and bioluminescent assays
	96	7418	Microlite TCT Plate	hydrophobic	cells	Reporter gene assays, Cytotoxicity, Apoptosis
	384	8155	Microlite 1 square wells with rounded corners	hydrophobic	peptide, polypeptide, lipoproteins	Chemiluminescent and bioluminescent assays
	96	9502887	White Universal Binding	hydrophobic	protein	Intracellular Ca ²⁺ assay
	96	95029770	White Universal Binding, Sterile with Lid	hydrophobic	protein	Phagocytosis assay, Antibiotic sensitivity testing
	96	8120	White Clear bottom plate, TC treated, Sterile with Lid	hydrophilic	tissue culture, cells	Tissue culture cytotoxicity, Apoptosis
	96	7561	Microlite 1+ 1 x 12 Strip Assembly	hydrophobic	protein	Chemiluminescent and bioluminescent assays
	96	7562	Microlite 2+ 1 x 12 Strip Assembly	hydrophobic	peptide, polypeptide, lipoproteins	Chemiluminescent and bioluminescent assays
	96	95029660	White 1 x 8 Universal Binding	hydrophobic	protein	Chemiluminescent and bioluminescent assays

Black and white plates for fluorescence readers

Instruments	Wells	Cat. no.	Description	Characteristics	Binding affinity	Examples of applications
Fluoroskan Ascent, Fluoroskan Ascent FL, Varioskan, Appliskan	96	7605	Microfluor 1 Black Plate	hydrophobic, hydrophilic, low background, low cross talk, high signal	peptide, polypeptide, lipoproteins	Fluorescent ELISA immunoassays
	96	7805	Microfluor 2 Black Plate		protein, glycoproteins, DNA	Enzyme-linked oligosorbent assays, Viral protease
	384	8255	Black Microfluor 1 square wells with rounded corners	hydrophobic	peptide, polypeptide, lipoproteins	Fluorescent ELISA immunoassays
	96	8220	Black Clear bottom plate, TC treated, Sterile with Lid	hydrophilic	tissue culture, cells	Tissue culture cytotoxicity, Apoptosis
	96	7705	Microfluor 1 White Plate	hydrophobic, hydrophilic, high signal reflectance and reduced background	peptide, polypeptide, lipoproteins	Fluorescent ELISA immunoassays
	96	7905	Microfluor 2 White Plate		protein, glycoproteins, DNA	Nucleic acid hybridization
	96	9502867	Black Universal Binding	hydrophobic	peptide, polypeptide, lipoproteins	Thioflavine T fluorometric assays
	96	95029840	Black Universal Binding, Sterile with Lid	hydrophobic	peptide, polypeptide, lipoproteins	Fluorescent ELISA immunoassays
	96	9502887	White Universal Binding	hydrophobic	peptide, polypeptide, lipoproteins	Fusion assays
	96	95029770	White Universal Binding, Sterile with Lid	hydrophobic	peptide, polypeptide, lipoproteins	Fluorescent ELISA immunoassays
	96	95029800	Black 1 x 8 Universal Binding	hydrophobic	peptide, polypeptide, lipoproteins	Fluorescent ELISA immunoassays
	96	95029660	White 1 x 8 Universal Binding	hydrophobic	protein lipoproteins	Fluorescent ELISA immunoassays



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