

SiliCycle MiniBlock® Configuration Guide



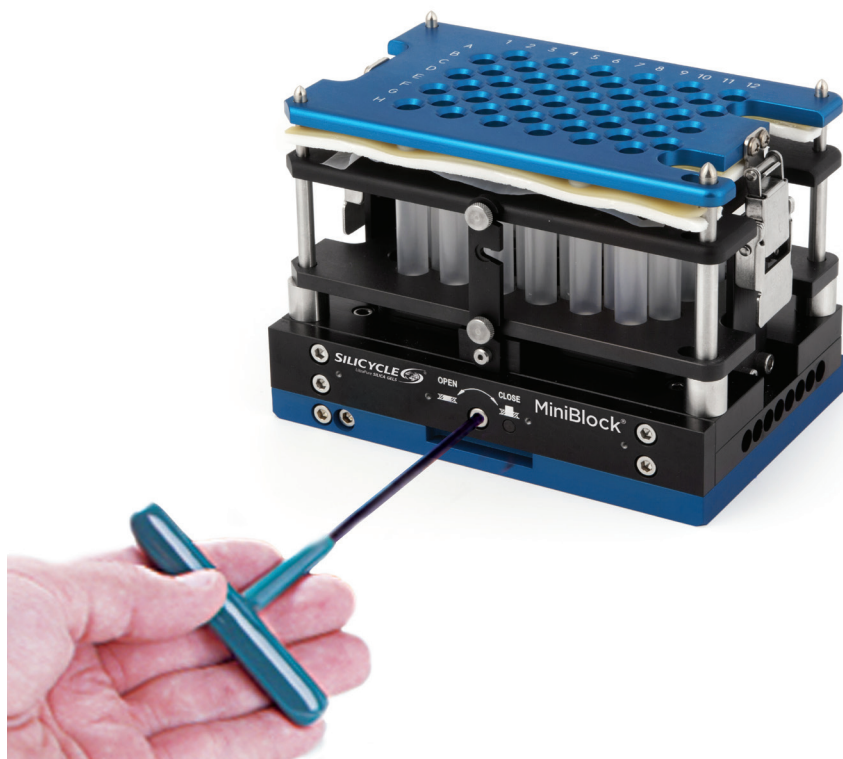
Table of contents

| | |
|--|----|
| Overview | 3 |
| Compact Synthesis Sets | 6 |
| 48 or 24-Positions | 6 |
| 12 or 6-Positions | 7 |
| Micro Synthesis Sets | 8 |
| Individual Items..... | 9 |
| SiliCycle MiniBlock Reactors | 9 |
| Heat Transfer Blocks | 9 |
| Insulation Wrap..... | 9 |
| Shaking and Washing Stations..... | 9 |
| Recirculator Manifold (2-Positions)..... | 9 |
| Collection Devices and Accessories | 10 |
| Air Push Assist Device | 10 |
| Inerting/Purging Manifolds | 11 |
| Purging/Evaporating Manifolds | 11 |
| Recommended Septa & Gaskets for Inert Atmosphere Manifolds | 11 |
| Manifold Upgrade Inerting/Purging to Purging/Evaporating | 11 |
| Positive Pressure Manifolds | 11 |
| Septa & Gaskets Configuration | 12 |
| Resin Dispenser..... | 14 |
| Basic Conversion Kit | 15 |
| Full Conversion Kit..... | 15 |
| SiliCycle MiniBlock® Consumables | 16 |
| SPE Cartridges | 20 |
| SiliCycle MiniBlock XT | 22 |

Overview

The SiliCycle MiniBlock product line is a multifunctional synthesis platform designed for:

- Solid-Phase Synthesis
- Solution-Phase Synthesis
- Peptide Synthesis
- Solid-Phase Extraction (SPE)



All racks conform to microtiter plate size and shape, providing flexibility for collection, compatibility with dry down devices and ease of use. Using the microtiter plate footprint also keeps the overall system footprint small, making it automation friendly.

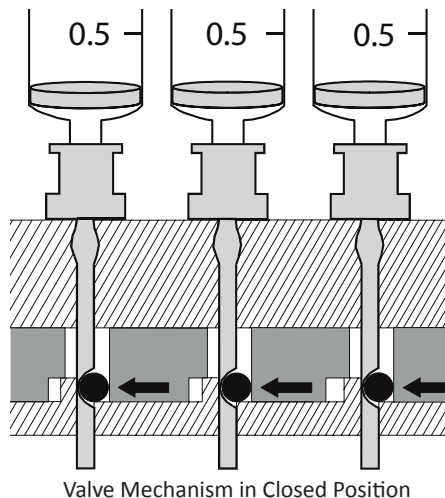
| Height | Width | Depth | Weight |
|------------|------------|------------|------------------|
| 5" (13 cm) | 7" (18 cm) | 5" (13 cm) | 6.4 lbs (2.9 kg) |

SiliCycle MiniBlock reactors and supporting parts are also available in kits for cost savings. The **Compact Synthesis Sets** are configured around two SiliCycle MiniBlocks, and the **Micro Synthesis Sets** around one.

Unique Valve Body Design

The unique valve body design allows the opening and closing of all vessels at the same time. Supporting parts and accessories allow the following functionalities:

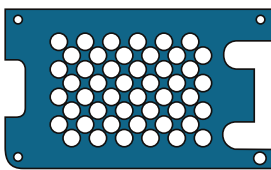
- reactions performed under inert atmosphere
- robust mixing via orbital shaking
- solvent dispensing
- resin and scavenger resin dispensing



Color Guide

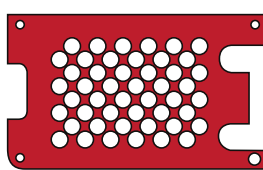
- Parts are color-coded depending on the number of positions.

Blue



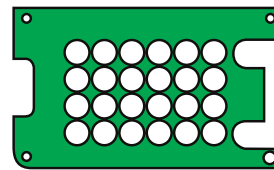
48-Positions, 4 mL

Red



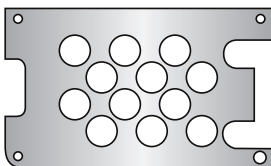
48-Positions, 4 mL

Green



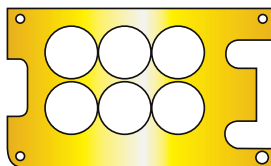
24-Positions, 10 mL

Silver



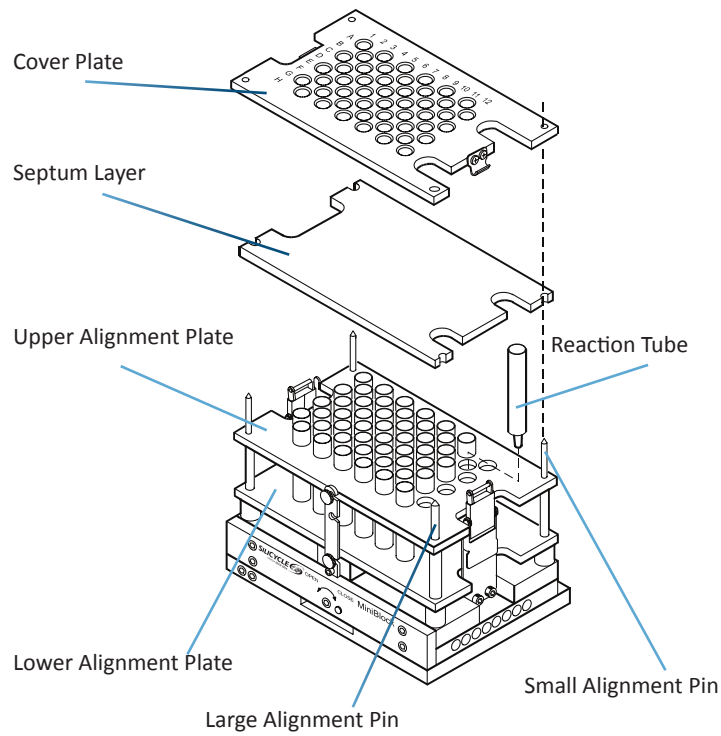
12-Positions, 20 mL

Gold

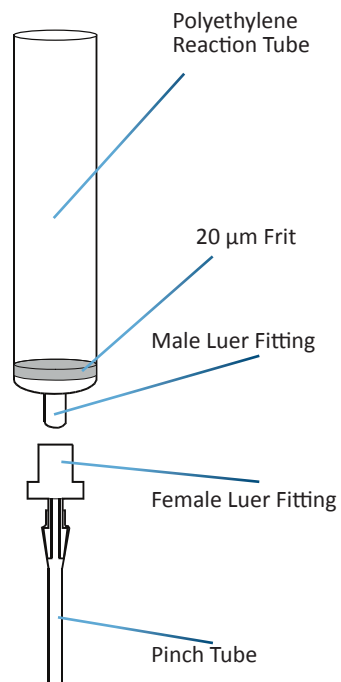


6-Positions, 40 mL

SiliCycle MiniBlock Components



Reaction Tube Components



Compact Synthesis Sets

48 or 24-Positions (with Disposable Polypropylene Reaction Tubes)

These Compact synthesis sets contain all components necessary for 96 or 48 parallel reactions. Two SiliCycle MiniBlocks configured for 48 or 24 positions each, shaking and washing station, vacuum base for product collection and consumables, are all included and priced favorably over the same items ordered separately. SiliCycle MiniBlocks can be chosen as one of each color (red and blue) or both blocks the same color.

Red/Blue combination is required for collection into a 96-Positions format.

Collection racks and containers are sold separately.

48-Positions Includes: 8 x Box of 4 mL Polypropylene Reaction Tubes (50/Box)*

24-Positions Includes: 8 x Box of 10 mL Polypropylene Reaction Tubes (25/Box)*

* Glass reaction tubes are also available. Please order all items separately. For glassware, see Page 16.



Package Contents

| Quantity | Description |
|----------|--|
| 2 | SiliCycle MiniBlock Synthesizers (Choose Format, Array and Volume Below) |
| 1 | New Compact Shaking Station (Choose Voltage Below) |
| 1 | Vacuum Collection Base (See Page 10) |
| 2 | Tall Tube Extender (See Page 10) |
| 1 | Counter Weight for Shaking Station |
| 1 | Air Push Assist Device (See Page 10) |
| 1 | Maintenance Kit (Detailed Below) |
| 2 | Tool Kits |

Please Select One of the Following Personal Sets: 115V or 230V Set

| PN 115V | PN 230V | Description |
|----------|----------|--|
| 13820013 | 13820095 | Compact Synthesis Set 48-Positions (4 mL): 1-Blue 1-Red |
| 13820011 | 13820094 | Compact Synthesis Set 48-Positions (4 mL): 2-Blue |
| 13820012 | 13820093 | Compact Synthesis Set 48-Positions (4 mL): 2-Red |
| 13820048 | 13200194 | Compact Synthesis Set 24-Positions (10 mL): 1-Blue 1-Red |
| 13820049 | 13200195 | Compact Synthesis Set 24-Positions (10 mL): 2-Blue |
| 13200187 | 13820053 | Compact Synthesis Set 24-Positions (10 mL): 2-Red |

Maintenance Kit Details

| PN | Description | Qty/Box | # of Boxes | Total |
|----------|--------------------------|---------|------------|-------|
| 13260492 | Pinch Tube Inserts | 50 | 2 | 100 |
| 13820118 | Multi Layer Septa | 5 | 2 | 10 |
| 13742093 | Molded Compression Cords | 8 | 2 | 16 |
| 13520117 | Red Plugs | 50 | 2 | 100 |



13742045

Options

| PN | Description | Quantity |
|----------|--|----------|
| 17012024 | Heat Transfer Block 24-Positions** (13742059) (See Page 9) | 2 |
| | Recirculator Manifold ** (13742045) (See Page 9) | 1 |
| 17012048 | Heat Transfer Block 48-Positions** (13742005) (See Page 9) | 2 |
| | Recirculator Manifold ** (13742045) (See Page 9) | 1 |

** Temperature range dependent on recirculator. Recirculator not included.



13742059

13742005

12 or 6-Positions (with Glass Reaction Tubes)

Designed to allow flexibility for reaction array and vessel volume. These two SiliCycle MiniBlocks are configured for 12 or 6 positions. Synthesizers, shaking and washing station, vacuum base for product collection and consumables are all included and priced favorably over the same items ordered separately. SiliCycle MiniBlocks can be chosen as one of each color (red and blue) or both blocks the same color.

Collection racks and containers are sold separately.

12-Positions Includes: 2 x Box of 20 mL Glass Reaction Tubes (12/Box)

6-Positions Includes: 2 x Box of 40 mL Glass Reaction Tubes (6/Box)



Package Contents

| Quantity | Description |
|----------|--|
| 2 | SiliCycle MiniBlock Synthesizers (Choose Format, Array and Volume Below) |
| 1 | New Compact Shaking Station (Choose Voltage Below) |
| 1 | Vacuum Collection Base (See Page 10) |
| 1 | Tall Tube Extender (See Page 10) |
| 1 | Tall Tube Double Extender (See Page 10) |
| 1 | Counter Weight for Shaking Station |
| 1 | Air Push Assist Device (See Page 10) |
| 1 | Maintenance Kit (Detailed Below) |
| 2 | Tool Kits |

Please Select One of the Following Personal Sets: 115V or 230V Set

| PN 115V | PN 230V | Description |
|----------|----------|--|
| 13820086 | 13820083 | Compact Synthesis Set 12-Positions (20 mL): 1-Blue 1-Red |
| 13820084 | 13820082 | Compact Synthesis Set 12-Positions (20 mL): 2-Blue |
| 13820085 | 13820081 | Compact Synthesis Set 12-Positions (20 mL): 2-Red |
| 13820092 | 13820089 | Compact Synthesis Set 6-Positions (40 mL): 1-Blue 1-Red |
| 13820090 | 13820088 | Compact Synthesis Set 6-Positions (40 mL): 2-Blue |
| 13820091 | 13820087 | Compact Synthesis Set 6-Positions (40 mL): 2-Red |

Maintenance Kit Details

| PN | Description | Qty/Box | # of Boxes | Total |
|----------|--------------------------|---------|------------|-------|
| 13260492 | Pinch Tube Inserts | 50 | 2 | 100 |
| 13820118 | Multi Layer Septa | 5 | 2 | 10 |
| 13742093 | Molded Compression Cords | 8 | 2 | 16 |
| 13520117 | Red Plugs | 50 | 2 | 100 |



13742045

Options

| PN | Description | Quantity |
|----------|--|----------|
| 17012006 | Heat Transfer Block 6-Positions** (13742061) (See Page 9) | 2 |
| | Recirculator Manifold ** (13742045) (See Page 9) | 1 |
| 17012012 | Heat Transfer Block 12-Positions** (13742060) (See Page 9) | 2 |
| | Recirculator Manifold ** (13742045) (See Page 9) | 1 |

** Temperature range dependent on recirculator. Recirculator not included



13742061



13742060

Micro Synthesis Sets

These Micro synthesis sets contain all components necessary for 6, 12, 24 or 48 parallel reactions. One SiliCycle MiniBlock, shaking and washing station, vacuum base for product collection and consumables are all included and priced favorably over the same items ordered separately. SiliCycle MiniBlock can be chosen red or blue.

Collection racks and containers are sold separately.

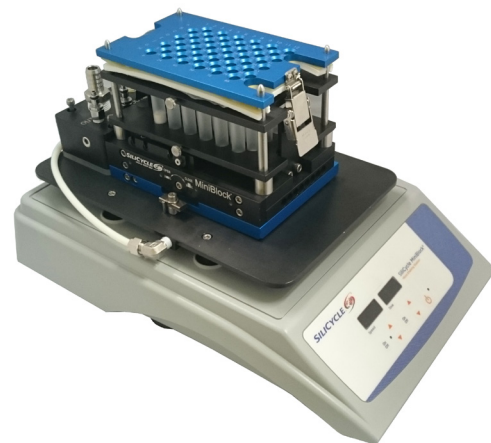
48-Positions Includes: 4 x Box of 4 mL Polypropylene Reaction Tubes (50/Box)*

24-Positions Includes: 4 x Box of 10 mL Polypropylene Reaction Tubes (25/Box)*

12-Positions Includes: 1 x Box of 20 mL Glass Reaction Tubes (12/Box)

6-Positions Includes: 1 x Box of 40 mL Glass Reaction Tubes (6/Box)

* Glass reaction tubes are also available. Please order all items separately. For glassware, see Page 16.



Package Contents

| Quantity | Description |
|----------|---|
| 1 | SiliCycle MiniBlock Synthesizer (Choose Format, Array and Volume Below) |
| 1 | New Micro Shaking Station (Choose Voltage Below) |
| 1 | Vacuum Collection Base (See Page 10) |
| 1 | Tall Tube Extender (See Page 10) |
| 1 | Maintenance Kit (Detailed Below) |
| 1 | Tool Kit |

Please Select One of the Following Personal Sets: 115V or 230V Set

| PN 115V | PN 230V | Description |
|----------|----------|--|
| 17120148 | 17240148 | Micro Synthesis Set 48-Positions (4 mL): Red |
| 17120248 | 17240248 | Micro Synthesis Set 48-Positions (4 mL): Blue |
| 17120124 | 17240124 | Micro Synthesis Set 24-Positions (10 mL): Red |
| 17120224 | 17240224 | Micro Synthesis Set 24-Positions (10 mL): Blue |
| 17120112 | 17240112 | Micro Synthesis Set 12-Positions (20 mL): Red |
| 17120212 | 17240212 | Micro Synthesis Set 12-Positions (20 mL): Blue |
| 17120106 | 17240106 | Micro Synthesis Set 6-Positions (40 mL): Red |
| 17120206 | 17240206 | Micro Synthesis Set 6-Positions (40 mL): Blue |

Maintenance Kit Details

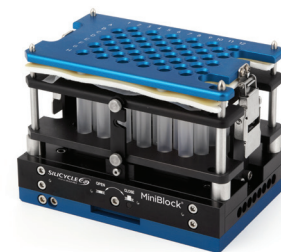
| PN | Description | Qty/Box | # of Boxes |
|----------|--------------------------|---------|------------|
| 13260492 | Pinch Tube Inserts | 50 | 1 |
| 13820118 | Multi Layer Septa | 5 | 1 |
| 13742093 | Molded Compression Cords | 8 | 1 |
| 13520117 | Red Plugs | 50 | 1 |

Individual Items

SiliCycle MiniBlock Reactors

Patented reactor with built-in valve design. Available in 48, 24, 12, and 6-Positions arrays. Reaction vessel volumes are 4 mL, 10 mL, 20 mL and 40 mL respectively (*not included*).

| PN | Description |
|----------|--|
| 13742044 | SiliCycle MiniBlock Reactor Blue: 48-Positions |
| 13742043 | SiliCycle MiniBlock Reactor Red: 48-Positions |
| 13742200 | SiliCycle MiniBlock Reactor Blue: 24-Positions |
| 13742201 | SiliCycle MiniBlock Reactor Red: 24-Positions |
| 13742210 | SiliCycle MiniBlock Reactor Blue: 12-Positions |
| 13742211 | SiliCycle MiniBlock Reactor Red: 12-Positions |
| 13742220 | SiliCycle MiniBlock Reactor Blue: 6-Positions |
| 13742221 | SiliCycle MiniBlock Reactor Red: 6-Positions |



13742044
(Tubes not included)

Heat Transfer Blocks

Heating/Cooling Block, allowing uniform cooling to -40°C, and heating to 120°C*. Available in 48, 24, 12, and 6-Positions arrays. Includes quick-disconnect fittings.

| PN | Description |
|----------|---|
| 13742061 | Heat Transfer Block: 6-Positions (<i>Gold</i>) |
| 13742060 | Heat Transfer Block: 12-Positions (<i>Silver</i>) |
| 13742059 | Heat Transfer Block: 24-Positions (<i>Green</i>) |
| 13742005 | Heat Transfer Block: 48-Positions (<i>Black</i>) |

*Requires glass reaction tubes, see Page 16.



Heat Transfer Blocks (PN on the Left)

Insulation Wrap

Ensures maximal uniformity between reactors when working under extreme temperatures.

| PN | Description |
|----------|---|
| 13200240 | Insulation Wrap for SiliCycle MiniBlock |



13200240

Shaking and Washing Stations

High performance orbital shaker with integrated basins for wash and rinse capability. Customized and configured to provide vigorous vortex mixing for 1 (*Micro*) or 2 (*Compact*) SiliCycle MiniBlocks.

| PN | Description |
|----------|------------------------------------|
| 17001120 | New Compact Shaking Station, 115V* |
| 17001240 | New Compact Shaking Station, 230V* |
| 17002120 | New Micro Shaking Station, 115V |
| 17002240 | New Micro Shaking Station, 230V |

* Require counter weight (13742012) when used with only 1 block



17001120

17002120

Recirculator Manifold (2-Positions)

Allows easy connection of Heat Transfer Blocks to a recirculator. Mounted on the shaking station. Includes quick-disconnect hoses.

| PN | Description |
|----------|---|
| 13742045 | Recirculator Manifold (Includes: 4 x Quick Disconnect Hoses) |
| 13742012 | Counter Weight for Compact Shaking Station (Provides stability and reduced vibration, when a full set of SiliCycle MiniBlocks is not being used) |



13742012

Collection Devices and Accessories

For collection into deep well plates, glassware and other racks (see Pages 18 & 19).

| PN | Description |
|-----------------|--|
| 13742008 | Vacuum Collection Base For cleavage and collection of reaction products into microplate format racks under vacuum. Includes a white Deep Well Plate Spacer (13260307), a Black Rack Spacer (13260351) and a Collection Tube Height Gauge (13260515). |
| 13742010 | Tall Tube Extender For collection vessels > 50mm |
| 13742067 | Tall Tube Double Extender For collection vessels > 80mm |
| 13260351 | Rack Spacer, Black For collection into 48-Positions test-tube racks 13260399, 13260398, 13260484 and 13460485 (see Page 18) |
| 13260307 | Deep Well Plate Spacer, White For collection into Deep Well Plates and other racks (see Pages 18 & 19) |
| 13260515 | Collection Tube Height Gauge |



13742008



13742010

13742067



13260307

13260351

Air Push Assist Device

Simple device that helps drain reaction tubes by applying gentle air pressure.

| PN | Description |
|-----------------|--------------------------------------|
| 13742014 | Air Push Assist Device: 48-Positions |
| 13742120 | Air Push Assist Device: 24-Positions |
| 13742115 | Air Push Assist Device: 12-Positions |
| 13742116 | Air Push Assist Device: 6-Positions |



13742116

Inerting/Purging Manifolds

Inert gas manifold can be operated in continuous purging or static pressure modes. Internal septum prevents loss by evaporation and facilitates reagent addition or reaction sampling. Includes quick-disconnect gas fittings with shut off valve, allowing inert atmosphere to be maintained at all times. Automation friendly. Includes one box of sealing layer and one box of Inner/Piercing septa.

| PN | Description |
|-----------------|---|
| 13742183 | Inerting/Purging Manifold: 48-Positions (<i>Blue</i>) |
| 13742182 | Inerting/Purging Manifold: 48-Positions (<i>Red</i>) |



13742182

Purging/Evaporating Manifolds

Provides superior performance for maintaining Inert Atmosphere while providing a cost effective option for evaporating solvents. Includes quick-disconnect gas fittings with shut off valve, allowing inert atmosphere to be maintained at all times. Automation friendly. Includes one box of sealing layer and one box of Inner/Piercing septa.

| PN | Description |
|-----------------|--|
| 13200957 | Purging/Evaporating Manifold: 6-Positions |
| 13200951 | Purging/Evaporating Manifold: 12-Positions |
| 13200950 | Purging/Evaporating Manifold: 24-Positions |



13200957

Recommended Septa & Gaskets for Inert Atmosphere Manifolds

| MiniBlock Format | Inert Manifold PN | Internal Septum PN | Sealing Gaskets (<i>Bottom Gasket</i>) | |
|------------------------------|-------------------|--------------------|--|-----------------|
| | | | Rubber PN | Multi-Layer PN |
| 6-Positions | 13200957 | 13742152 | 13200992 | 13201040 |
| 12-Positions | 13200951 | 13742169 | 13200993 | 13201041 |
| 24-Positions | 13200950 | 13742170 | 13200994 | 13201042 |
| 48-Positions (<i>Red</i>) | 13742182 | 13200080 | 13200079 | 13200081 |
| 48-Positions (<i>Blue</i>) | 13742183 | | | |

Manifold Upgrade Inerting/Purging to Purging/Evaporating

Manifold upgrade enables Inerting/Purging Manifolds to have blow down evaporation capability. Upgrades contain the evaporation plate and sealing gasket.

| PN | Description |
|-----------------|---|
| 16004228 | Upgrade to Purging/Evaporating Manifold: 6-Positions |
| 16004229 | Upgrade to Purging/Evaporating Manifold: 12-Positions |
| 16004230 | Upgrade to Purging/Evaporating Manifold: 24-Positions |

Positive Pressure Manifolds

Provides positive pressure to all reaction tubes to assist draining. Also used to push solvents from one SiliCycle MiniBlock to a second SiliCycle MiniBlock containing resins/sorbents.

| PN | Description |
|-----------------|--|
| 13742018 | Positive Pressure Manifold Blue: 48-Positions |
| 13742019 | Positive Pressure Manifold Red: 48-Positions |
| 13742109 | Positive Pressure Manifold Blue: 24-Positions |
| 13742110 | Positive Pressure Manifold Red: 24-Positions |
| 13260397 | Sealing Gasket for Positive Pressure Manifold Punched, Ultra-Pure Natural Rubber |





13742109

1) Septa & Gaskets for Inerting/Purging and Purging/Evaporating Manifolds (*compatible with vacuum*)

Disposable septa that ensure reaction vessel sealing and facilitate manual or automated access. The inert atmosphere manifolds require both Inner/Piercing septa and Sealing Gasket.


Inner/Piercing Septa

Ultra-Pure Natural Rubber Septa.

| PN | Description | Qty/Box | | |
|----------|---|---------|---|---|
| 13742152 | Inner/Piercing Septa, 6-Positions (<i>for 13200957</i>) | 5 |  13742169 |  13200080 |
| 13742169 | Inner/Piercing Septa, 12-Positions (<i>for 13200951</i>) | | | |
| 13742170 | Inner/Piercing Septa, 24-Positions (<i>for 13200950</i>) | | | |
| 13200080 | Inner/Piercing Septa, 48-Positions (<i>for 13742182 and 13742183</i>) | | | |

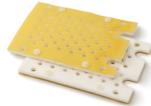

Natural Rubber Sealing Gaskets

Ultra-Pure Natural Rubber used to firmly seal reaction vessels against the inert atmosphere manifold.

| | | | |
|----------|---|---|---|
| 13200992 | Sealing Gasket, 6-Positions (<i>for 13200957 and 16004228</i>) | 5 |  13200993 |
| 13200993 | Sealing Gasket, 12-Positions (<i>for 13200951 and 16004229</i>) | | |
| 13200994 | Sealing Gasket, 24-Positions (<i>for 13200950 and 16004230</i>) | | |
| 13200079 | Sealing Gasket, 48-Positions (<i>for 13742182 and 13742183</i>) | | |


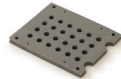
2) Increased chemical resistance Septa & Gaskets (*No Vacuum*)

Advanced sealing composite septa consisting of pure natural rubber, expanded polyethylene (*for minimizing solvent loss*), and Teflon® layer (*for chemical resistance*). Superior air exclusion to maintain inert atmosphere. Not for use with vacuum/purge cycle inerting.



| PN | Description | Qty/Box | | |
|----------|---|---------|---|---|
| 13201040 | Multi-Layer Sealing Gasket, 6-Positions (<i>for 13200957</i>) | 5 |  13200081 |  13201041 |
| 13201041 | Multi-Layer Sealing Gasket, 12-Positions (<i>for 13200951</i>) | | | |
| 13201042 | Multi-Layer Sealing Gasket, 24-Positions (<i>for 13200950</i>) | | | |
| 13200081 | Multi-Layer Sealing Gasket, 48-Positions (<i>for 13742182 and 13742183</i>) | | | |

3) High Temperature Resistant Septa & Gaskets

New Septa consisting of Silicone. Easily pierced with cannulas and syringes. Works with Inerting/Purging and Purging/Evaporating Manifolds. For use with elevated reaction temperatures.

| PN | Description | Qty/Box | | |
|----------|---|---------|---|---|
| 13200872 | Septum Silicone, 6, 12 and 24-Positions | 1 |  13200872 |  13200869 |
| 13200871 | Silicone Sealing Gasket, 6-Positions | | | |
| 13200870 | Silicone Sealing Gasket, 12-Positions | | | |
| 13200869 | Silicone Sealing Gasket, 24-Positions | | | |

4) Septa for Top Plate

| PN | Description | Qty/Box | | |
|----------|--|---------|---|---|
| 13820118 | Multi-Layer Septa Composite septa consisting of pure natural rubber, expanded polyethylene, and Teflon® layer. | 5 |  13820118 |  13742080 |
| 13742080 | High Temperature Silicone Multi-Layer Septa Composite septa consisting of pure natural rubber (<i>for easy piercing and resealing</i>), Teflon® layer (<i>for chemical resistance</i>), and silicone foam for use with elevated temperatures. | 1 | | |

Chemical resistance

● Excellent
 ● Good
 ● Poor

| Temperature Range | Concentrated Acids | Diluted Acids | Bases | Alcohols | Aliphatic Hydrocarbons | Aromatic Hydrocarbons | Halogenated Solvents | Ketones |
|-------------------|--------------------|---------------|-------|----------|------------------------|-----------------------|----------------------|---------|
| -40°C to 80°C | ● | ● | ● | ● | ● | ● | ● | ● |
| | ● | ● | ● | ● | ● | ● | ● | ● |
| | ● | ● | ● | ● | ● | ● | ● | ● |
| | ● | ● | ● | ● | ● | ● | ● | ● |

| | | | | | | | | |
|---------------|---|---|---|---|---|---|---|---|
| -40°C to 80°C | ● | ● | ● | ● | ● | ● | ● | ● |
| | ● | ● | ● | ● | ● | ● | ● | ● |
| | ● | ● | ● | ● | ● | ● | ● | ● |
| | ● | ● | ● | ● | ● | ● | ● | ● |

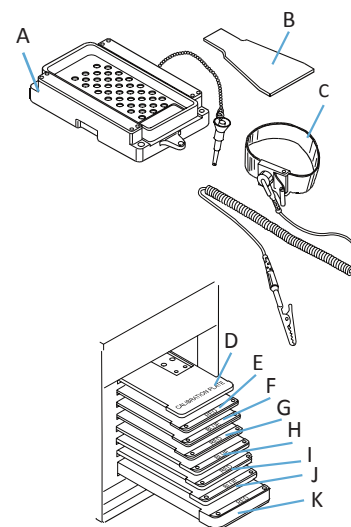
| Temperature Range | Concentrated Acids | Diluted Acids | Bases | Alcohols | Aliphatic Hydrocarbons | Aromatic Hydrocarbons | Halogenated Solvents | Ketones |
|-------------------|--------------------|---------------|-------|----------|------------------------|-----------------------|----------------------|---------|
| -40°C to 80°C | ● | ● | ● | ● | ● | ● | ● | ● |
| | ● | ● | ● | ● | ● | ● | ● | ● |
| | ● | ● | ● | ● | ● | ● | ● | ● |
| | ● | ● | ● | ● | ● | ● | ● | ● |

| Temperature Range | Concentrated Acids | Diluted Acids | Bases | Alcohols | Aliphatic Hydrocarbons | Aromatic Hydrocarbons | Halogenated Solvents | Ketones |
|-------------------|--------------------|---------------|-------|----------|------------------------|-----------------------|----------------------|---------|
| -40°C to 160°C | ● | ● | ● | ● | ● | ● | ● | ● |
| | ● | ● | ● | ● | ● | ● | ● | ● |
| | ● | ● | ● | ● | ● | ● | ● | ● |
| | ● | ● | ● | ● | ● | ● | ● | ● |

| Temperature Range | Concentrated Acids | Diluted Acids | Bases | Alcohols | Aliphatic Hydrocarbons | Aromatic Hydrocarbons | Halogenated Solvents | Ketones |
|-------------------|--------------------|---------------|-------|----------|------------------------|-----------------------|----------------------|---------|
| -40°C to 80°C | ● | ● | ● | ● | ● | ● | ● | ● |
| -40°C to 160°C | ● | ● | ● | ● | ● | ● | ● | ● |

Resin Dispenser

| PN | Description |
|---|--|
| 13742086 | 24-Positions Resin Dispenser |
| | Sliding plate dispensing device for rapid delivery of resins/powders to 24-Positions format. |
| | Description and parts: |
| | A. Resin Dispenser Base, 24-Positions with Quick Release Pin |
| | B. Resin Spreader |
| | C. Anti-Static Grounding Strap |
| | D24. Calibration Plate |
| | F24. Dispensing Plate- 20 μ L, approx. 10mg |
| | G24. Dispensing Plate- 50 μ L, approx. 20mg |
| | H24. Dispensing Plate- 100 μ L, approx. 50mg |
| J24. Dispensing Plate- 200 μ L, approx. 100mg | |
| K24. Dispensing Plate- 400 μ L, approx. 200mg | |
| 13822001 | 48-Positions Resin Dispenser |
| | Sliding plate dispensing device for rapid delivery of resins/powders to 48-Positions format. |
| | Description and parts: |
| | A. Resin Dispenser Base, 48-Positions with Quick Release Pin |
| | B. Resin Spreader |
| | C. Anti-Static Grounding Strap |
| | D48. Calibration Plate |
| | E48. Dispensing Plate- 10 μ L, approx. 5mg |
| | F48. Dispensing Plate- 20 μ L, approx. 10mg |
| | G48. Dispensing Plate- 50 μ L, approx. 20mg |
| H48. Dispensing Plate- 100 μ L, approx. 50mg | |
| 13742084 | 48-Positions High Volume Plate Set |
| | Description and parts: |
| | I48. Dispensing Plate- 150 μ L, approx. 75mg |
| | J48. Dispensing Plate- 200 μ L, approx. 100mg |
| K48. Dispensing Plate- 400 μ L, approx. 200mg | |



Adapters for Resin Dispensers

Allows Resin Dispenser to be used with Reflux Layer or Heat Transfer Block in Place.

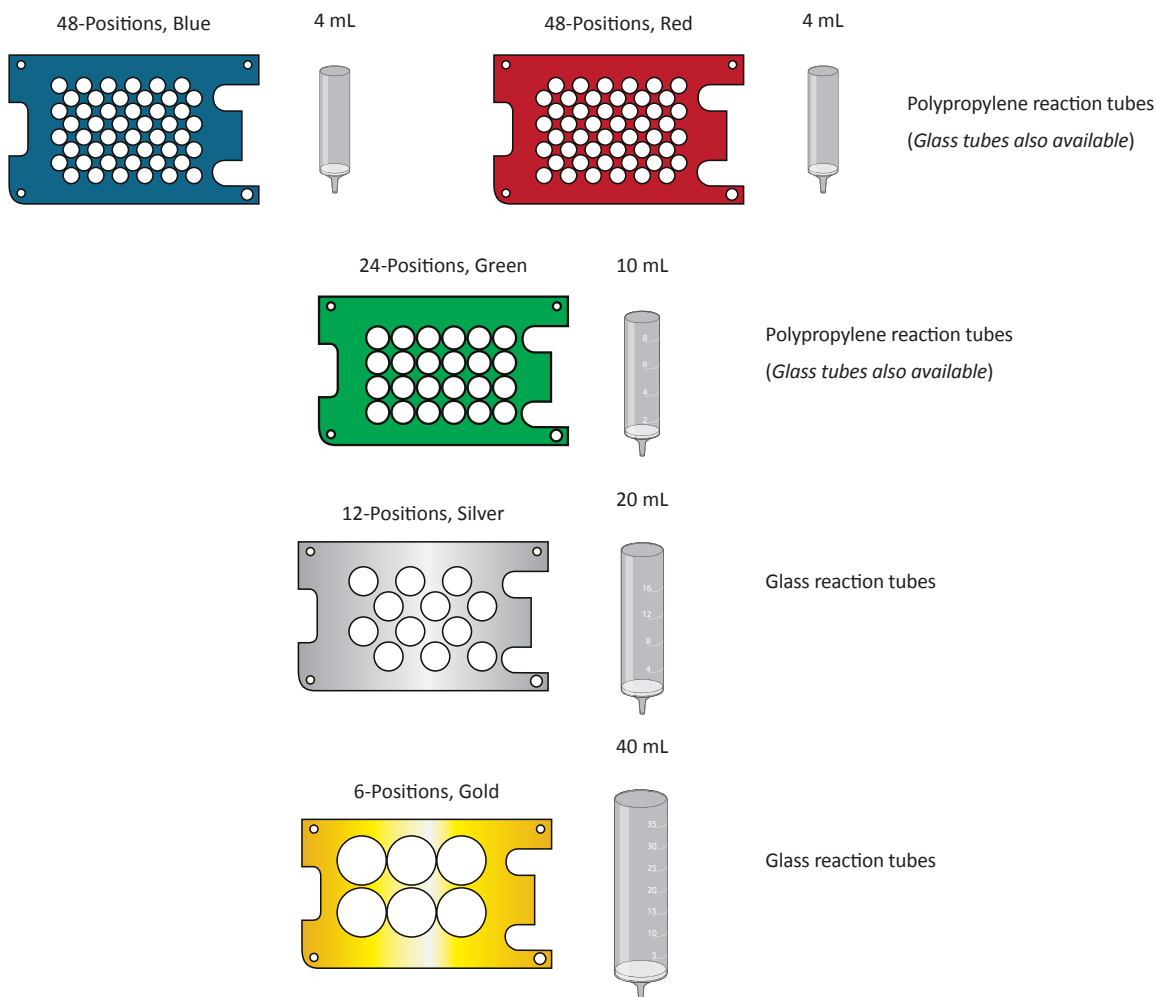
| PN | Description |
|-----------------|---|
| 13200926 | Adapter For Resin Dispenser: 24-Positions |
| 13200927 | Adapter For Resin Dispenser: 48-Positions |

Basic Conversion Kit

Includes two Alignment Plates, Top Plate, and Red Plugs for Pinch Tube Inserts. Requires the applicable reaction vessels (*polypropylene or glass*). Reaction tubes NOT included.

Please choose from the following:

| PN | Description |
|----------|--|
| 13820408 | Basic Conversion Kit: 48-Positions Blue (<i>no Red Plugs included</i>) |
| 13820409 | Basic Conversion Kit: 48-Positions Red (<i>no Red Plugs included</i>) |
| 13820410 | Basic Conversion Kit: 24-Positions |
| 13820430 | Basic Conversion Kit: 12-Positions |
| 13820450 | Basic Conversion Kit: 6-Positions |



Full Conversion Kit

Includes Heat Transfer Block, two Alignment Plates, Top Plate and Red Plugs for Pinch Tube Inserts. Package includes the applicable reaction vessels, polypropylene or glass.

| PN | Description |
|----------|--|
| 13820488 | 48-Positions Blue (<i>polypropylene reaction vessels, no Red Plugs included</i>) |
| 13820489 | 48-Positions Red (<i>polypropylene reaction vessels, no Red Plugs included</i>) |
| 13200062 | 24-Positions (<i>polypropylene reaction vessels</i>) |
| 13820490 | 12-Positions (<i>glass reaction vessels</i>) |
| 13820510 | 6-Positions (<i>glass reaction vessels</i>) |

SiliCycle MiniBlock® Consumables

Small Maintenance Kits

These kits include:

| PN | MiniBlock Configuration | Reaction Tubes Qty/Box | Pinch Tube Inserts Qty/Box | Multi-Layer Septa Qty/Box | Red Plugs Qty/Box | Compression Cords Qty/Box |
|----------|-------------------------|------------------------------------|----------------------------|---------------------------|-------------------|---------------------------|
| 13820104 | 48-Positions | 400 <i>Polypropylene, 4 mL</i> | 100 | 10 | 100 | 16 |
| 13200060 | 24-Positions | 200 <i>Polypropylene, 10 mL</i> | 100 | 10 | 100 | 16 |
| 13820004 | 12-Positions | 24 <i>Glass, 20 mL</i> | 100 | 10 | 100 | 16 |
| 13820005 | 6-Positions | 12 <i>Glass, 40 mL</i> | 100 | 10 | 100 | 16 |

Large Maintenance Kits

These kits include:

| PN | MiniBlock Configuration | Reaction Tubes Qty/Box | Pinch Tube Inserts Qty/Box | Multi-Layer Septa Qty/Box | Red Plugs Qty/Box | Compression Cords Qty/Box |
|----------|-------------------------|-------------------------------------|----------------------------|---------------------------|-------------------|---------------------------|
| 13820114 | 48-Positions | 2000 <i>Polypropylene, 4 mL</i> | 400 | 30 | 100 | 48 |
| 13200061 | 24-Positions | 1250 <i>Polypropylene, 10 mL</i> | 400 | 30 | 100 | 48 |

Disposable Reaction Tubes

| PN | Description |
|----------|---|
| 13521028 | 4 mL Reaction Tubes, Polypropylene, 50/Box Fritted 4 mL ultra-pure polypropylene reaction tubes for 48-Positions SiliCycle MiniBlock. Medium frit porosity: 20 µm. |
| 13521118 | 10 mL Reaction Tubes, Polypropylene, 25/Box Fritted 10 mL high purity polypropylene reaction tubes for 24-Positions SiliCycle MiniBlock. Medium frit porosity: 20 µm. |

Volume discount may apply. Please contact your SiliCycle representative.



13521028

Glass Reaction Tubes

| PN | Description |
|----------|---|
| 13521058 | 4 mL Reaction Tubes, Glass, 50/Box Fritted 4 mL borosilicate glass reaction tubes for 48-Positions SiliCycle MiniBlock. |
| 13521062 | 10 mL Reaction Tubes, Glass, 25/Box Fritted 10 mL borosilicate glass reaction tubes for 24-Positions SiliCycle MiniBlock. |
| 13521067 | 20 mL Reaction Tubes, Glass, 12/Box Fritted 20 mL borosilicate glass reaction tubes for 12-Positions SiliCycle MiniBlock. |
| 13521071 | 40 mL Reaction Tubes, Glass, 6/Box Fritted 40 mL borosilicate glass reaction tubes for 6-Positions SiliCycle MiniBlock. |



13521067

Individual Maintenance Items

| PN | Description |
|----------|---|
| 13260492 | <p>PFA Teflon® Pinch-Tube Inserts, 50/Box PFA Teflon® female luer fitting with Teflon® pinch-tube. Provides added chemical resistance (<i>particularly to Toluene</i>) and better tolerance to high temperatures* than polypropylene fittings.</p> <p>* For temperatures > 80°C, other high temperature components must also be used. Contact a SiliCycle specialist for more information.</p> |
| 13742093 | <p>Molded Compression Cords, 8/Box Improved material and larger diameter for better performance. Each SiliCycle MiniBlock contains eight compression cords in the valve mechanism.</p> |
| 13260310 | <p>Encapsulated Compression Cords, 8/Box PTFE coated cord for sealing pinch-tube inserts. Each SiliCycle MiniBlock contains eight compression cords in the valve mechanism. Offers increased chemical resistance compared to Molded Compression Cords.</p> |
| 13520117 | <p>Red Plugs for Pinch-Tube Inserts, 50/Box For sealing unused positions in SiliCycle MiniBlock base.</p> |
| 13521079 | <p>Replacement Frits for 4 mL Reaction Tubes, 50/Box Medium frit porosity (20 µm) for 4 mL polypropylene reaction tubes (13521028).</p> |
| 13100036 | <p>Replacement frits for 10 mL Reaction Tubes, 50/Box Medium frit porosity (20 µm) for 10 mL polypropylene reaction tubes (13521118).</p> |
| 13820122 | <p>Tool Kit (One of Each) Valve Key, Spare Hex-key, Reaction Tube Removal Tool, Pair of Pliers.</p> |



13260492



13742093



13260310



13520117



13820122

Racks and Deep Well Plates

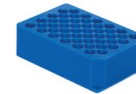
| PN | Description |
|----------|---|
| 13520111 | <p>Rack of Tall Minitubes, 1/Box 96-Positions microtiter plate array 2.5 mL volume, 9 mm D x 80 mm H.</p> |
| 13520112 | <p>Rack of Minitubes, 1/Box 96-Positions microtiter plate array 1.3 mL volume, 9 mm D x 47 mm H.</p> |
| 13520130 | <p>Deep Well Plate, 2.4 mL, 5/Box 96-Positions microtiter plate format.</p> |
| 13520131 | <p>Deep Well Plate, 5 mL, 5/Box 48-Positions microtiter plate format.</p> |
| 13520132 | <p>Deep Well Plate, 10 mL, 5/Box 24-Positions microtiter plate format.</p> |

48-Positions Racks

Accepts 12 x 75 mm and 12 x 100 mm test tubes.

Maximum volumes are 6 mL and 8 mL. (*Labware not included*).

| PN | Description |
|-----------------|--|
| 13260399 | Blue, 48-Positions: UHMW (<i>Polyethylene</i>) |
| 13260398 | Red, 48-Positions: UHMW (<i>Polyethylene</i>) |
| 13260484 | Blue, 48-Positions: Aluminum |
| 13260485 | Red, 48-Positions: Aluminum |



13260399

24-Positions Racks

Accepts 15 x 45 mm and 15 x 82 mm vials.

Maximum volumes are 3.7 mL and 6 mL. (*Labware not included*).

| PN | Description |
|-----------------|--|
| 13260444 | Blue, 24-Positions: UHMW (<i>Polyethylene</i>) |
| 13260443 | Red, 24-Positions: UHMW (<i>Polyethylene</i>) |
| 13260472 | Blue, 24-Positions: Aluminum |
| 13260473 | Red, 24-Positions: Aluminum |



13260429

24-Positions Racks

Accepts 17 x 61 mm and 17 x 112 mm vials.

Maximum volumes are 7.5 mL and 14 mL. (*Labware not included*).

| PN | Description |
|-----------------|--|
| 13260430 | Blue, 24-Positions: UHMW (<i>Polyethylene</i>) |
| 13260429 | Red, 24-Positions: UHMW (<i>Polyethylene</i>) |
| 13260474 | Blue, 24-Positions: Aluminum |
| 13260475 | Red, 24-Positions: Aluminum |



13260487

24-Positions Racks

Accepts 16 x 100 mm test tubes. Maximum volume is 15 mL. (*Labware not included*).

| PN | Description |
|-----------------|--|
| 13260456 | Blue, 24-Positions: UHMW (<i>Polyethylene</i>) |
| 13260457 | Red, 24-Positions: UHMW (<i>Polyethylene</i>) |
| 13260486 | Blue, 24-Positions: Aluminum |
| 13260487 | Red, 24-Positions: Aluminum |



13260431

12-Positions Racks

Accepts 21 x 70 mm and 21 x 112 mm test tubes.

Maximum volumes are 15 mL and 23 mL. (*Labware not included*).

| PN | Description |
|-----------------|--|
| 13260432 | Blue, 12-Positions: UHMW (<i>Polyethylene</i>) |
| 13260431 | Red, 12-Positions: UHMW (<i>Polyethylene</i>) |
| 13260476 | Blue, 12-Positions: Aluminum |
| 13260477 | Red, 12-Positions: Aluminum |

12-Positions Racks

Accepts 24 x 112 mm and 24 x 150 mm test tubes.

Maximum volumes are 38 mL and 45 mL. (*Labware not included*).

| PN | Description |
|-----------------|--|
| 13260460 | Blue, 12-Positions: UHMW (<i>Polyethylene</i>) |
| 13260461 | Red, 12-Positions: UHMW (<i>Polyethylene</i>) |
| 13260478 | Blue, 12-Positions: Aluminum |
| 13260479 | Red, 12-Positions: Aluminum |

6-Positions Racks

Accepts 28 x 95 mm and 28 x 140 mm scintillation vials.

Maximum volumes are 40 mL and 60 mL. (*Labware not included*).

| PN | Description |
|-----------------|---|
| 13260440 | Blue, 6-Positions: UHMW (<i>Polyethylene</i>) |
| 13260439 | Red, 6-Positions: UHMW (<i>Polyethylene</i>) |
| 13260480 | Blue, 6-Positions: Aluminum |
| 13260481 | Red, 6-Positions: Aluminum |



13260460

Collection Vessels

| PN | Description |
|-----------------|--|
| 13520111 | Rack of Tall 2.5 mL Polypropylene MiniTubes 9 x 80 mm, 1/Box |
| 13521100 | Glass, 6 mL Tube 12 x 75 mm, 72/Box |
| 13521101 | Polypropylene, 6 mL Test Tube 12 x 75 mm, 250/Box |
| 13521103 | Glass, 3.7 mL Vial 15 x 45 mm, 144/Box |
| 13521105 | Glass, 7.5 mL Vial 17 x 61 mm, 72/Box |
| 13521107 | Glass, 15 mL Test Tube 16 x 100 mm, 250/Box |
| 13521108 | Glass, 15 mL Vial 21 x 70 mm, 144/Box |

Transfer Adapters

Allows the transfer of products from one SiliCycle MiniBlock to another. Does not fit over heat transfer block.

| PN | Description |
|-----------------|--|
| 16004569 | Blue Transfer Adapter |
| 16004567 | Red Transfer Adapter |
| 13520120 | Replacement Plate for Transfer Adapter |



16004569



Two 48-Positions Blue SiliCycle MiniBlocks with Transfer Adapter and Positive Pressure Manifold

Silica-Based SPE Cartridges for SiliCycle MiniBlock

| PN | Description |
|--------------------|---|
| SPMB-R10030B-045P | SiliaPrep MB, Silica, 500 mg (4 mL), 48/Box |
| SPMB-R10030B-100P | SiliaPrep MB, Silica, 500 mg (10 mL), 24/Box |
| SPMB-R10030B-100S | SiliaPrep MB, Silica, 1,000 mg (10 mL), 24/Box |
| SPMB-AUT-0052-045P | SiliaPrep MB, Diatomaceous Earth, 500 mg (4 mL), 48/Box |
| SPMB-AUT-0052-100S | SiliaPrep MB, Diatomaceous Earth, 1,000 mg (10 mL), 24/Box |
| SPMB-R66030B-045P | SiliaPrep MB, Carbonate, 500 mg (4 mL), 48/Box |
| SPMB-R66030B-100S | SiliaPrep MB, Carbonate, 1,000 mg (10 mL), 24/Box |
| SPMB-R52030B-045P | SiliaPrep MB, Amine (WAX), 500 mg (4 mL), 48/Box |
| SPMB-R52030B-100S | SiliaPrep MB, Amine (WAX), 1,000 mg (10 mL), 24/Box |
| SPMB-R70030B-045P | SiliaPrep MB, Carboxylic Acid (WCX), 500 mg (4 mL), 48/Box |
| SPMB-R70030B-100S | SiliaPrep MB, Carboxylic Acid (WCX), 1,000 mg (10 mL), 24/Box |
| SPMB-R38030B-045P | SiliaPrep MB, Cyano, 500 mg (4 mL), 48/Box |
| SPMB-R38030B-100S | SiliaPrep MB, Cyano, 1,000 mg (10 mL), 24/Box |
| SPMB-R35030B-045P | SiliaPrep MB, Diol, 500 mg (4 mL), 48/Box |
| SPMB-R35030B-100S | SiliaPrep MB, Diol, 1,000 mg (10 mL), 24/Box |
| SPMB-R31030B-045P | SiliaPrep MB, C8, 500 mg (4 mL), 48/Box |
| SPMB-R31030B-100S | SiliaPrep MB, C8, 1,000 mg (10 mL), 24/Box |
| SPMB-R33230B-045P | SiliaPrep MB, C18 (17%) mono, 500 mg (4 mL), 48/Box |
| SPMB-R33230B-100S | SiliaPrep MB, C18 (17%) mono, 1,000 mg (10 mL), 24/Box |
| SPMB-R66530B-045P | SiliaPrep MB, TMA Chloride nec (SAX), 500 mg (4 mL), 48/Box |
| SPMB-R66530B-100S | SiliaPrep MB, TMA Chloride nec (SAX), 1,000 mg (10 mL), 24/Box |
| SPMB-R66430B-045P | SiliaPrep MB, TMA Acetate nec (SAX-2), 500 mg (4 mL), 48/Box |
| SPMB-R66430B-100S | SiliaPrep MB, TMA Acetate nec (SAX-2), 1,000 mg (10 mL), 24/Box |
| SPMB-R60530B-045P | SiliaPrep MB, Tosic Acid (SCX), 500 mg (4 mL), 48/Box |
| SPMB-R60530B-100S | SiliaPrep MB, Tosic Acid (SCX), 1,000 mg (10 mL), 24/Box |
| SPMB-R51230B-045P | SiliaPrep MB, Propylsulfonic Acid (SCX-2), 500 mg (4 mL), 48/Box |
| SPMB-R51230B-100S | SiliaPrep MB, Propylsulfonic Acid (SCX-2), 1,000 mg (10 mL), 24/Box |
| SPMB-R49030B-045P | SiliaPrep MB, Diamine, 500 mg (4 mL), 48/Box |
| SPMB-R49030B-100S | SiliaPrep MB, Diamine, 1,000 mg (10 mL), 24/Box |
| SPMB-R48030B-045P | SiliaPrep MB, Triamine, 500 mg (4 mL), 48/Box |
| SPMB-R48030B-100S | SiliaPrep MB, Triamine, 1,000 mg (10 mL), 24/Box |
| SPMB-R51030B-045P | SiliaPrep MB, Thiol, 500 mg (4 mL), 48/Box |
| SPMB-R51030B-100S | SiliaPrep MB, Thiol, 1,000 mg (10 mL), 24/Box |
| SPMB-R69530B-045P | SiliaPrep MB, Thiourea, 500 mg (4 mL), 48/Box |
| SPMB-R69530B-100S | SiliaPrep MB, Thiourea, 1,000 mg (10 mL), 24/Box |
| SPMB-R69030B-045P | SiliaPrep MB, TAAcOH, 500 mg (4 mL), 48/Box |
| SPMB-R69030B-100S | SiliaPrep MB, TAAcOH, 1,000 mg (10 mL), 24/Box |
| SPMB-R69230B-045P | SiliaPrep MB, TAAcONa, 500 mg (4 mL), 48/Box |
| SPMB-R69230B-100S | SiliaPrep MB, TAAcONa, 1,000 mg (10 mL), 24/Box |
| SPMB-R79030B-045P | SiliaPrep MB, DMT, 500 mg (4 mL), 48/Box |
| SPMB-R79030B-100S | SiliaPrep MB, DMT, 1,000 mg (10 mL), 24/Box |
| SPMB-R79230B-045P | SiliaPrep MB, Imidazole, 500 mg (4 mL), 48/Box |
| SPMB-R79230B-100S | SiliaPrep MB, Imidazole, 1,000 mg (10 mL), 24/Box |
| SPMB-R80530B-045P | SiliaPrep MB, Cysteine, 500 mg (4 mL), 48/Box |
| SPMB-R80530B-100S | SiliaPrep MB, Cysteine, 1,000 mg (10 mL), 24/Box |
| SPMB-R54430B-045P | SiliaPrep MB, DEAM, 500 mg (4 mL), 48/Box |
| SPMB-R54430B-100S | SiliaPrep MB, DEAM, 1,000 mg (10 mL), 24/Box |

Other phases available upon request. Please contact your SiliCycle representative.

Polymeric SPE Cartridges for SiliCycle MiniBlock

| PN | Description |
|-----------------|--|
| SPMB-P0002-045G | SiliaPrepX MB, HLB, 200 mg (4 mL), 48/Box |
| SPMB-P0002-100P | SiliaPrepX MB, HLB, 500 mg (10 mL), 24/Box |
| SPMB-P0001-045G | SiliaPrepX MB, DVB, 200mg (4 mL), 48/Box |
| SPMB-P0001-100P | SiliaPrepX MB, DVB, 500 mg (10 mL), 24/Box |
| SPMB-P0005-045G | SiliaPrepX MB, SCX, 200mg (4 mL), 48/Box |
| SPMB-P0005-100P | SiliaPrepX MB, SCX, 500 mg (10 mL), 24/Box |
| SPMB-P0015-045G | SiliaPrepX MB, WCX, 200mg (4 mL), 48/Box |
| SPMB-P0015-100P | SiliaPrepX MB, WCX, 500 mg (10 mL), 24/Box |
| SPMB-P0010-045G | SiliaPrepX MB, SAX, 200mg (4 mL), 48/Box |
| SPMB-P0010-100P | SiliaPrepX MB, SAX, 500 mg (10 mL), 24/Box |
| SPMB-P0020-045G | SiliaPrepX MB, WAX, 200mg (4 mL), 48/Box |
| SPMB-P0020-100P | SiliaPrepX MB, WAX, 500 mg (10 mL), 24/Box |

SPE Development Kits for SiliCycle MiniBlock

| PN | Description | Phases |
|------------------|---|--|
| KSPMB-K2000-045P | SiliaPrep MB, Silica-Based Chromatography Development Kit, 500 mg (4 mL), 8 cartridges for each phase. | Silica, C18, Cyano, Diol, Diatomaceous Earth |
| KSPMB-K2000-100S | SiliaPrep MB, Silica-Based Chromatography Development Kit, 1,000 mg (10 mL), 4 cartridges for each phase. | Silica, C18, Cyano, Diol, Diatomaceous Earth |
| KSPMB-K2001-045P | SiliaPrep MB, Silica-Based Ion Exchange Development Kit, 500 mg (4 mL), 8 cartridges for each phase. | SCX, SCX-2, WCX, SAX, SAX-2, WAX |
| KSPMB-K2001-100S | SiliaPrep MB, Silica-Based Ion Exchange Development Kit, 1,000 mg (10 mL), 4 cartridges for each phase. | SCX, SCX-2, WCX, SAX, SAX-2, WAX |
| KSPMB-K2002-045P | SiliaPrep MB, Silica-Based Metal Scavenging Development Kit, 500 mg (4 mL), 6 cartridges for each phase. | Thiol, DMT, Thiourea, Triamine, TAAcOH, TAAcONa, Imidazole, DEAM |
| KSPMB-K2002-100S | SiliaPrep MB, Silica-Based Metal Scavenging Development Kit, 1,000 mg (10 mL), 3 cartridges for each phase. | Thiol, DMT, Thiourea, Triamine, TAAcOH, TAAcONa, Imidazole, DEAM |
| KSPMB-K2003-045G | SiliaPrepX MB, Polymeric Development Kit, 200 mg (4 mL), 6 cartridges for each phase. | HLB, DVB, SCX, WCX, SAX, WAX |
| KSPMB-K2003-100P | SiliaPrepX MB, Polymeric Development Kit, 500 mg (10 mL), 3 cartridges for each phase. | HLB, DVB, SCX, WCX, SAX, WAX |



Need bigger volumes and reflux capability? The MiniBlock XT is for you!

SiliCycle MiniBlock XT

SiliCycle MiniBlock XT is an easy to use reaction block designed for synthesis and screening reactions. Applications include synthesis of small organic molecules, optimization of critical process parameters and screening for optimal reaction conditions.

The SiliCycle MiniBlock XT is widely used by chemists working in biopharma, chemical, petrochemical, and polymers. SiliCycle MiniBlock XT's flexible and modular design fits easily into your workflow, and is ideal for applications supported by statistical design of experiments (DoE).

SiliCycle MiniBlock XT enables reactions to be run under stringent conditions, allowing complete freedom when choosing a synthetic route. Also designed by the discovery and development team at Bristol-Myers Squibb, the SiliCycle MiniBlock XT has been further developed and enhanced to be compatible with the SiliCycle MiniBlock product line.

| SiliCycle MiniBlock XT | XT Basic Kit | XT Set |
|--|--------------|--------|
| SiliCycle MiniBlock XT Reactor Frame | 1 | 1 |
| Purging/Evaporating Manifold | - | 1 |
| Vessel Rack | 1 | 1 |
| Vessel Rack Removal Tool | 1 | 1 |
| Refluxing Layer | - | 1 |
| Inner/Piercing Septa & Sealing Gaskets | - | 5 |
| Top Plate | 1 | 1 |
| Septa for Top Plate | 5 | 5 |
| Hot Plate Stirrer | - | 1 |

(Reaction Vessels and Stir Bars Included)

Ask your Configuration Guide to learn more about the SiliCycle MiniBlock XT: miniblock@silicycle.com or visit our website at <http://www.silicycle.com/ca/products/silicycle-miniblock/miniblock-xt>.

Applications Developed with SiliCycle MiniBlock XT



- Chem. Eur. J., **2015**, 21, 9249–9255

Solid-Phase Parallel Synthesis of Functionalised Medium-to-Large Cyclic Peptidomimetics through Three-Component Coupling Driven by Aziridine Aldehyde Dimers

The first solid-phase parallel synthesis of macrocyclic peptides using three-component coupling driven by aziridine aldehyde dimers is described. The method supports the synthesis of 9- to 18-membered aziridine-containing macrocycles, which are then functionalized by nucleophilic opening of the aziridine ring. This constitutes a robust approach for the rapid parallel synthesis of macrocyclic peptides.



- ACS Comb. Sci., **2014**, 16, 232-237

Parallel Solution-Phase Synthesis and General Biological Activity of a Uridine Antibiotic Analog Library

A small library of ninety four uridine antibiotic analogs was synthesized. A number of samples exhibited a variety of promising inhibitory, agonist, antagonist, or activator properties with enzymes and receptors in primary screens supplied and reported through the NIH MLPCN program.



- Nucleosides, Nucleotides and Nucleic Acids, **2014**, 33, 709-729

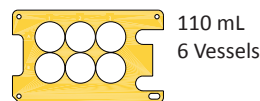
Synthesis and General Biological Activity of a Small Adenosine-5'-(Carboxamide and Sulfanilamide) Library

A small library of fifty-five adenosine peptide analogs was synthesized, under the Pilot Scale Library (PSL) Program of the NIH Roadmap initiative. No marked anticancer or antimalarial activity was noted on preliminary cellular testing. Initial screening through the MLPCN program, however, indicates that these analogs may show diverse and interesting biological activities.

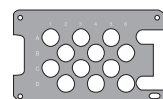
- Parallel Synthesis
- Reaction Screening
- Catalyst Screening
- Reflux and Inerting

Inert Conditions

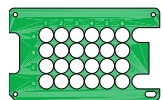
Continuous inert gas flow enables air/moisture sensitive reactions. Easily add reagents through the septum layer.



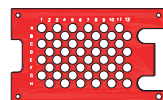
110 mL
6 Vessels



55 mL
12 Vessels



18 mL
24 Vessels



11.5 mL
48 Vessels

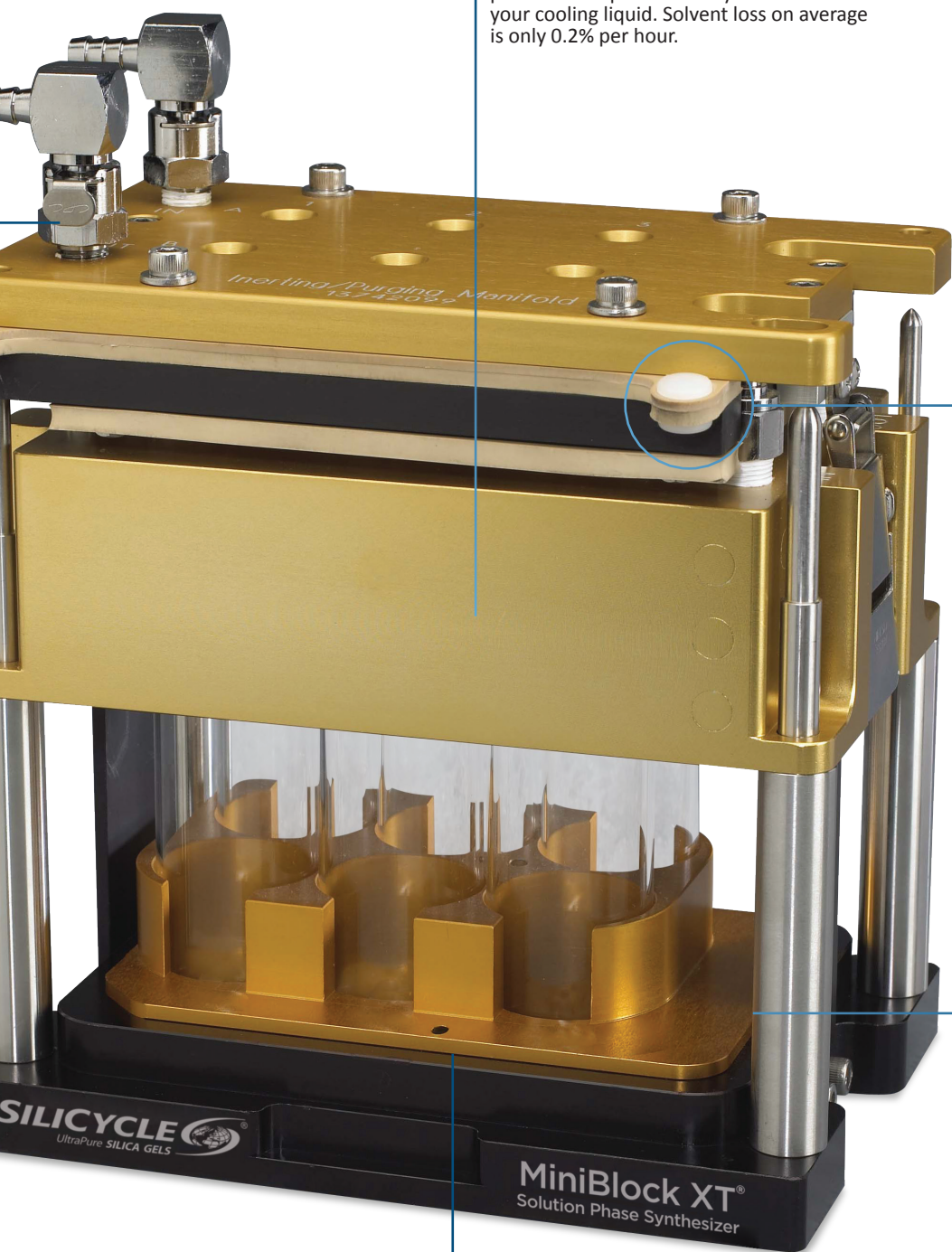
Configure Your SiliCycle MiniBlock XT to Suit Your Needs

Easily configure the SiliCycle MiniBlock XT to choose the scale and number of experiments based on your project requirements.

SiliCycle MiniBlock's performance has been outstanding even under the most stringent reaction conditions. Many of these require completely inert and anhydrous conditions at temperatures as low as -70°C.

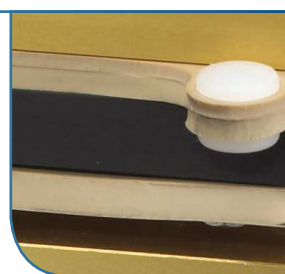
Prof. Dieter Enders, Head of the Institute of Organic Chemistry, Aachen University of Technology (RWTH), Germany





Efficient Reflux

Single reflux jacket cools all vessels. No need for individual condensers. Fittings are provided for quick and easy connection to your cooling liquid. Solvent loss on average is only 0.2% per hour.



Easy Reaction Setup

All vessels are sealed with a single septum layer and allow easy access to reactions.



Heating and Cooling

Precision heating to 120°C and cooling down to -20°C are achieved using modular heat transfer jackets. Temperature uniformity and reproducibility is within 1°C at 80°C.

Modular Racks

Readily interchangeable reaction vessel racks enable simple conversion between 6, 12, 24, and 48-Positions arrays. The 24 and 48-Positions vessel racks are compatible with parallel centrifugal evaporators.

