

# Cool-It™

For round bottom  
flasks up to 2 litres

**NEW  
PRODUCT**

*The safest and  
most efficient  
way of cooling and  
stirring a  
round bottom  
flask*



[www.radleys.com](http://www.radleys.com)

# Cool-It™ insulated bowls for round bottom flask up to 2 litres...

The safest and most efficient way of cooling and stirring round bottom flasks to  $-78^{\circ}\text{C}$ ...



Small Cool-It bowl for flasks up to 400ml

Cool-It replaces fragile glass dewars, unstable plastic bowls and keeps your chemistry colder for longer...

The compact and virtually unbreakable Cool-It insulated bowls are designed to fit onto a standard stirring hotplate to cool and stir round bottom flasks, beakers, test tubes etc.

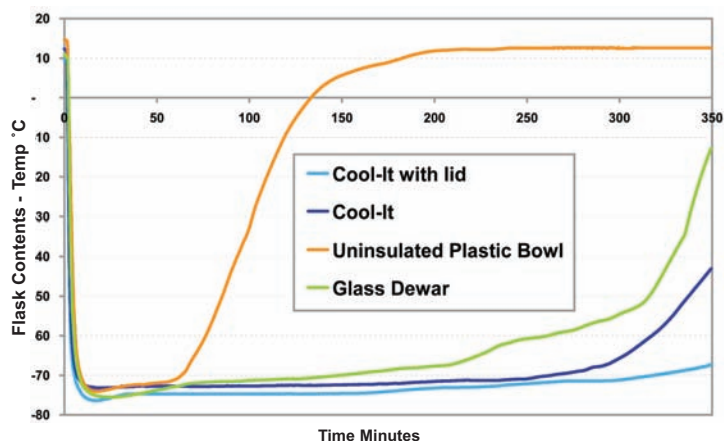
## Cool-It keeps it cooler for longer...

The excellent design and insulation qualities of the Cool-It bowls keep your sample cooler for longer.

- Compared to a standard non-insulated plastic bowl Cool-It will keep your sample below  $-70^{\circ}\text{C}$  for up to 5 times longer.
- Compared to a glass dewar Cool-It will keep your reactions below  $-70^{\circ}\text{C}$  for twice as long.

## Cool-It vs Glass Dewar

Acetone & Dry Ice, 250ml flask, 100ml acetone



## Optional lid increases cooling time by 20%...

Cool-It bowls come with unique two piece lid, which is easily fitted (and removed) once your flask is in place. Using the lid can keep your reaction cool for up to 20% longer, minimises condensation and ice formation on your flask (maintaining visibility of the contents) and prevents spitting from the cooling mixture.



## Unbreakable...

Cool-It bowls are manufactured from a robust, chemically resistant HDPE casing encapsulating a high quality insulated foam core. The combination of tough composite materials not only provides excellent insulation but is also durable, and unlike fragile glass dewars, Cool-It is virtually unbreakable if dropped.

Cool-It bowls available with FREE Lid



Small Cool-It bowl with lid, stirrer, stand and digital thermometer



Cool-It is virtually unbreakable and designed to allow powerful stirring with all leading brands of stirrer including Heidolph, IKA, Eylea and Radleys...

#### Easy pour spout and handle...

Cool-It's unique non-drip spout and ergonomically designed handle makes the disposal of waste solvents much safer and easier than with a standard dewar or bowl; avoiding accidental spillages and creating a safer working environment.

#### Large and small bowl options...

Cool-It is available in two sizes of bowl. The small Cool-It bowl is suitable for flasks up to 400ml, and large Cool-It bowl for flasks up to 2 Litres. Both sizes have their own dedicated lid.

#### Protects your stirrer and minimises spills...

As well as insulating your reaction Cool-It minimises condensation on the outer surfaces, protecting your stirrer from frost and moisture ingress. It is also designed to fit securely onto the top plate minimising accidental spills and the risk of the bowl being knocked off the top plate.

#### Cool-It fits on to all popular brands of stirring hotplate...

Cool-It bowls are suitable for use with all stirring hotplates with a circular top plate up to 145mm in diameter. For stirring hotplates with 135mm  $\varnothing$  top plates (e.g. IKA, Eylea, Radleys etc) an optional top plate adapter is available if required.

#### Cool-It accessories...

A useful range of accessories are available including, clamp, stand, stirring hotplate, digital thermometer, scoop, protective gloves, apron and face shield.

#### Cool-It accepts all shapes and sizes of round bottom and florentine flask...

including 10ml, 50ml, 100ml, 150ml, 200ml, 250ml, 300ml, 400ml, 500ml, 1 litre and 2 litre...

Easy pour design with spout and handle



Large Cool-It bowl for flasks up to 2 litres



Large Cool-It bowl with lid, stirrer, stand and digital thermometer



# Cool-It™ Specifications & Ordering Information



## Cool-It Bowls

### Cool-It Small Bowls

RR71011	Cool-It Small Bowl + Free Lid
RR71012	Cool-It Small Bowl
RR71015	Cool-It Small Lid
RR61085	Adapter Plate for 135mm Stirring Hotplates

### Cool-It Large Bowls

RR71021	Cool-It Large Bowl + Free Lid
RR71022	Cool-It Large Bowl
RR71025	Cool-It Large Lid
RR61085	Adapter Plate for 135mm Stirring Hotplates

## Cool-It Systems

### Cool-It Basic System 1

RR71500	Cool-It Basic System 1
	1 x RR71011 Cool-It Small Bowl + Free Lid
	1 x RR71021 Cool-It Large Bowl + Free Lid
	1 x RR61085 Adapter Plate for 135mm Stirring Hotplates
	1 x RR71200 Stirring Bar Evaluation Kit - for flasks (pk 10)
	1 x RR99908 Dry Ice Scoop

### Cool-It Standard System 2

RR71501	Cool-It Standard System 2
	1 x RR71011 Cool-It Small Bowl + Free Lid
	1 x RR71021 Cool-It Large Bowl + Free Lid
	1 x RR61085 Adapter Plate for 135mm Stirring Hotplates
	1 x RR99905 Digital Thermometer (-250C to +400C) and 200mm Probe
	1 x RR71100 Support Stand A-Shape Base
	1 x RR71105 Support Rod 600x12.5mm
	1 x RR71110 Retort Clamp to 85mm
	1 x RR71115 Boss Head 16mm
	1 x RR71200 Stirring Bar Evaluation Kit - for flasks (pk 10)
	1 x RR99908 Dry Ice Scoop

### Cool-It Complete System 3

RR71502	Cool-It Complete System 3
	1 x RR71011 Cool-It Small Bowl + Free Lid
	1 x RR71021 Cool-It Large Bowl + Free Lid
	1 x RR61085 Adapter Plate for 135mm Stirring Hotplates
	1 x RR98072 Carousel Stirring Hotplate 230v UK Plug
	1 x RR99905 Digital Thermometer (-250C to +400C) and 200mm Probe
	1 x RR71100 Support Stand A-Shape Base
	1 x RR71105 Support Rod 600x12.5mm
	2 x RR71110 Retort Clamp to 85mm
	2 x RR71115 Boss Head 16mm
	1 x RR71200 Stirring Bar Evaluation Kit - for flasks (pk 10)
	1 x RR99908 Dry Ice Scoop
	1 x RR99909 Cold Temperature Apron 1060mm long, Waterproof
	1 x RR99910 Protective Face Shield
	1 x RR98024 Protective Cold Temperature Gloves

### Cooling Protection Kit

RR71505	Cooling Protection Kit
	1 x RR99909 Cold Temperature Apron 1060mm long, Waterproof
	1 x RR99910 Protective Face Shield
	1 x RR98024 Protective Cold Temperature Gloves

### Clamp & Stand Kit

RR71510	Flask Stand & Clamp Kit
	1 x RR71100 Support Stand Base A-Shape
	1 x RR71105 Support Rod 600x12.5mm
	1 x RR71110 Retort Clamp to 85mm
	1 x RR71115 Boss Head 16mm

## Cool-It Accessories

### Stirring Hotplates & Temperature Controller

RR98072	Carousel Stirring Hotplate 230v UK Plug
RR98072/EURO	Carousel Stirring Hotplate 230v Euro Plug
RR98072/JAP	Carousel Stirring Hotplate 110v Japanese Plug
RR98072/SWISS	Carousel Stirring Hotplate 240v Swiss Plug
RR98072/USA	Carousel Stirring Hotplate 115v US Plug
RR98073	Carousel Temperature Controller

### PTFE Magnetic Stirring Bars

RR98075	Cross Shape Stirring Bar 10mm (for 5 to 10ml) pk 40
RR98091	Cross Shape Stirring Bar 16.5mm RE (for 25 to 50ml) pk 20
RR99064	Elliptical Stirring Bar 25mm RE (for 100 to 400ml) pk 10
RR95920	Oval Stirring Bar 40mm (for 500 to 1000ml) pk 5
RR95921	Oval Stirring Bar 50mm (for 2000ml) pk 5
RR71200	Stirring Bar Evaluation Kit - for flasks, pk 10 (contains 2 each of the above stirring bars)

### Cool-It Accessories

RR99905	Digital Thermometer (-250C to +400C) and 200mm Probe
RR99906	Digital Thermometer (-250C to +400C)
RR99907	200mm Temperature Probe
RR99908	Dry Ice Scoop
RR99909	Cold Temperature Apron 1060mm long, Waterproof
RR99910	Protective Face Shield
RR98024	Protective Cold Temperature Gloves

### Support Stands & Clamps

RR71100	Support Stand A-Shape Base
RR71105	Support Rod 600 x 12.5mm
RR71110	Retort Clamp to 85mm
RR71115	Boss Head 16mm

Prices are in Pounds Sterling or Euros and exclude VAT and delivery.  
For pricing in other currencies please contact your local distributor



# Heat-On™ Specifications & Ordering Information



## Heat-On blocks with Fluoropolymer Coating

### Heat-On Blocks for Multi-well Holder with Fluoropolymer Coating

RR61005	Heat-On Multi-Well Holder (Polymer coated)
RR61010	Heat-On 10ml Insert (Polymer coated)
RR61015	Heat-On 25ml Insert (Polymer coated)
RR61020	Heat-On 50ml Insert (Polymer coated)
RR61025	Heat-On 100ml Insert (Polymer coated)
RR61030	Heat-On 150ml Insert (Polymer coated)
RR61065	Heat-On Inserts for 8 x 16mm Tubes (Polymer coated)
RR61070	Heat-On Inserts for 4 x 20mm Tubes (Polymer coated)
RR61075	Heat-On Inserts for 4 x 24mm Tubes (Polymer coated)

### Heat-On Blocks with Fluoropolymer Coating

RR61040	Heat-On 250ml Block (Polymer coated)
RR61045	Heat-On 500ml Block (Polymer coated)
RR61050	Heat-On 1 Litre Block (Polymer coated)
RR61055	Heat-On 2 Litre Block (Polymer coated)
RR61060	Heat-On 3 Litre Block (Polymer coated)
RR61063	Heat-On 5 Litre Block (Polymer coated)
RR61041	Heat-On 250ml Block (Polymer coated) with Flask Sidearm Cut Outs

### Heat-On Florentine (pear-shaped) Blocks with Fluoropolymer Coating

RR61032	Heat-On 200ml Florentine Block (Polymer Coated)
RR61042	Heat-On 300ml Florentine Block (Polymer Coated)
RR61046	Heat-On 500ml Florentine Block (Polymer Coated)
RR61051	Heat-On 1 Litre Florentine Block (Polymer Coated)
RR61056	Heat-On 2 Litre Florentine Block (Polymer Coated)

### Heat-On Multi-well System with Fluoropolymer Coating

RR61000	Heat-On Multi-Well System (Polymer coated)
	1 x RR61005 Heat-On Multi-well Holder (Polymer coated)
	2 x RR61015 Heat-On 25ml Insert (Polymer coated)
	2 x RR61020 Heat-On 50ml Insert (Polymer coated)
	2 x RR61025 Heat-On 100ml Insert (Polymer coated)
	1 x RR61085 Adapter Plate for 135mm Hotplates

### Heat-On Multi-well Basic System with Fluoropolymer Coating

RR61001	Heat-On Multi-Well Basic System (Polymer coated)
	1 x RR61005 Heat-On Multi-well Holder (Polymer coated)
	1 x RR61015 Heat-On 25ml Insert (Polymer coated)
	1 x RR61020 Heat-On 50ml Insert (Polymer coated)
	1 x RR61025 Heat-On 100ml Insert (Polymer coated)
	1 x RR61085 Adapter Plate for 135mm Hotplates

## Heat-On blocks with Anodised Finish

### Heat-On Blocks for Multi-well Holder with Anodised Finish

RR62005	Heat-On Multi-Well Holder
RR62010	Heat-On 10ml Insert
RR62015	Heat-On 25ml Insert
RR62020	Heat-On 50ml Insert
RR62025	Heat-On 100ml Insert
RR62030	Heat-On 150ml Insert
RR62065	Heat-On Inserts for 8 x 16mm Tubes
RR62070	Heat-On Inserts for 4 x 20mm Tubes
RR62075	Heat-On Inserts for 4 x 24mm Tubes

### Heat-On Blocks with Anodised Finish

RR62040	Heat-On 250ml Block
RR62045	Heat-On 500ml Block
RR62050	Heat-On 1 Litre Block
RR62055	Heat-On 2 Litre Block
RR62060	Heat-On 3 Litre Block
RR62063	Heat-On 5 Litre Block
RR62041	Heat-On 250ml Block with Flask Sidearm Cut Outs

## Heat-On blocks with Anodised Finish - continued

### Heat-On Florentine (pear-shaped) Blocks with Anodised Finish

RR62032	Heat-On 200ml Florentine Block
RR62042	Heat-On 300ml Florentine Block
RR62046	Heat-On 500ml Florentine Block
RR62051	Heat-On 1 Litre Florentine Block
RR62056	Heat-On 2 Litre Florentine Block

### Heat-On Multi-well System with Anodised Finish

RR62000	Heat-On Multi-Well System
	1 x RR62005 Heat-On Multi-well Holder
	2 x RR62015 Heat-On 25ml Insert
	2 x RR62020 Heat-On 50ml Insert
	2 x RR62025 Heat-On 100ml Insert
	1 x RR61085 Adapter Plate for 135mm Hotplates

### Heat-On Multi-well Basic System with Anodised Finish

RR62001	Heat-On Multi-Well Basic System
	1 x RR62005 Heat-On Multi-well Holder
	1 x RR62015 Heat-On 25ml Insert
	1 x RR62020 Heat-On 50ml Insert
	1 x RR62025 Heat-On 100ml Insert
	1 x RR61085 Adapter Plate for 135mm Hotplates

## Heat-On Accessories

### Stirring Hotplates & Temperature Controller

RR98072	Carousel Stirring Hotplate 230v UK Plug
RR98072/EURO	Carousel Stirring Hotplate 230v Euro Plug
RR98072/JAP	Carousel Stirring Hotplate 110v Japanese Plug
RR98072/SWISS	Carousel Stirring Hotplate 240v Swiss Plug
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RR98073	Carousel Temperature Controller

### PTFE Magnetic Stirring Bars

RR98075	Cross Shape Stirring Bar 10mm (for 5 to 10ml) pk 40
RR98091	Cross Shape Stirring Bar 16.5mm RE (for 25 to 50ml) pk 20
RR99064	Elliptical Stirring Bar 25mm RE (for 100 to 400ml) pk 10
RR95920	Oval Stirring Bar 40mm (for 500 to 1000ml) pk 5
RR95921	Oval Stirring Bar 50mm (for 2000ml) pk 5
RR71200	Stirring Bar Evaluation Kit - for flasks, pk 10

### Heat-On Accessories

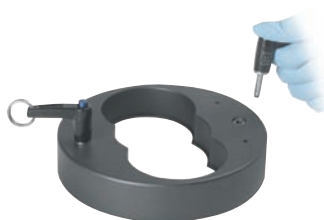
RR61080	Heat-On Safety Lifting Handles (Pair)
RR61085	Adapter Plate for 135mm Hotplates
RR71100	Support Stand A-Shape Base
RR71105	Support Rod 600 x 12.5mm
RR71110	Retort Clamp to 85mm
RR71115	Boss Head 16mm

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# Heat-On™ heats round bottom flasks from 10ml to 5 litres...

Simply the safest, fastest, most efficient way of heating and stirring a round bottom flask...



Heat-On Multi-well Block Holder  
(with optional safety lifting handles)



Heat-On Multi-well Block Holder  
with 50ml and 100ml flask inserts



Multi-well flask inserts are available for  
10ml, 25ml, 50ml, 100ml & 150ml flasks



Multi-well Block Holder can accept one  
or two inserts as required.

Replace messy oil baths, heating mantles, avoid spills and make your chemistry safer, cleaner and faster...

**It is accepted that oil baths and heating mantles are no longer the preferred choice of chemists to heat round bottom flasks.**

The risk of oil fires and injury from hot oil spills, plus the mess and disposal costs associated with the use of oil, mean that oil baths no longer represent safe or environmentally friendly working practice in labs. Heating mantles are expensive, difficult to clean, do not respond well to liquid spills and often create hot spots when heating.

Therefore safety aware scientists are increasingly turning to Heat-On as the safe, cost efficient and high performance alternative to heating standard round bottom flasks.

## Heat-On offers benefits that make a real difference...

- All Heat-On blocks are manufactured from solid aluminium providing excellent, even heat transfer to the entire block, preventing hot spots.
- Heat-On's weight-saving design reduces the thermal mass of the block, making the heat-up times significantly faster. This weight-saving design also offers faster post synthesis cool down times.
- Heat-On blocks feature a proprietary well design, that eliminates cracking of flasks, whilst allowing the Heat-On blocks to have deeper wells, maximising the contact surface area to in-turn improve heat-up times and minimising the differential between the block and solution temperature.
- Heat-On blocks have two probe holes for insertion of temperature probe/s.
- Removable lifting handles ensure safe and rapid removal of the blocks from the heat source.
- Blocks can be used up to 200°C and 260°C for short periods.

## Heat-On heats hotter, faster...

- Heat-up tests have shown Heat-On can boil a 250ml flask of water in under 11 minutes, faster than an oil bath and faster than competitive blocks.
- Whilst another controlled test showed that a 2000ml Heat-On block and flask, containing 1000ml flask of water boiled 66% faster than the competition.
- Heat-On is also more efficient - using 30% less energy than a competitive block, when boiling water over a 7 hour period.

## Fluoropolymer coating gives superb chemical resistance...

Heat-On blocks have an innovative fluoropolymer coating that offers outstanding chemical resistance to most solvents, acids and alkalis. The coating also extends the product life, is easy-to-clean and reduces heat-up time. Heat-On blocks are also available as standard with a lower cost anodised finish if preferred.

## Multi-well block holder and inserts...

This unique Multi-well block holder is designed to hold either one or two inserts for flasks or tubes\*. The inserts are available for 10ml, 25ml, 50ml, 100ml and 150ml flasks as well as multi-tube inserts for 16mm, 20mm and 24mm tubes or vials. Flask inserts also feature cut-away sides for use with two or three neck flasks and accept the optional safety lifting handles. \*Only accepts one 150ml insert.



Heat-On blocks  
now available for  
**Florentine  
Flasks!**  
[www.radleys.com](http://www.radleys.com)





Heat-On accepts 10ml, 50ml, 100ml, 150ml, 200ml, 300ml, 500ml, 1 litre, 2 litre, 3 litre and 5 litre round bottom and Florentine flasks...

Not all blocks designs are the same...

Test results show that Heat-On heats up to 66% faster and uses 50% less energy than other leading brands of block.

To see the test results, visit [www.radleys.com](http://www.radleys.com) to download the new Heat-On Application Bulletin

Heat-On is an easy to use, efficient, heating and stirring work station designed to accept standard round bottom flasks from 10ml to 5 litres...

### Unique well design prevents cracking of glassware...

Heat-On blocks feature a proprietary well design, that eliminates cracking of flasks, whilst allowing the Heat-On blocks to have deeper wells, maximising the heated surface area to in-turn improve heat-up times.

### Cleaner...

Heat-On saves money by removing the need for oil and its costly disposal, and by making the cleaning of oil-free glassware much easier.

### Removable safety lifting handles...

Optional safety lifting handles have a simple and secure quick release mechanism that allows the user to quickly attach the handles and remove the block from the heat source, even whilst it remains hot. We offer this as an option rather than compromising the overall design by having them permanently attached.



### Heat-On fits on to all leading brands of stirring hotplate...

Heat-On blocks are suitable for use with all hotplates up to 145mm in diameter including Heidolph, IKA and the Radleys Stirring Hotplate. An optional aluminium adapter for 135mm Hotplates (required for IKA and the Radleys Stirring Hotplate) comes free when you buy any Heat-On System.



### Heat-On blocks for large flasks from 250ml to 5 litres...

Each Heat-On block (250ml, 500ml, 1 litre, 2 litre, 3 litre & 5 litre) is a stand-alone product that can be placed directly onto your stirring hotplate - these blocks do not use reducing inserts to accept smaller flasks, thereby maximising heat transfer from a single piece design. All single well blocks feature two probe holes and accept the optional safety lifting handles.



250ml Heat-On block



500ml Heat-On block



1 Litre Heat-On block



NEW 5 Litre Heat-On block

Popular 250ml Heat-On block with hotplate and temp. controller



1 Litre Heat-On block with hotplate and temp. controller



2 Litre Heat-On block with hotplate and temp. controller

# Heat-On™

For round bottom  
and Florentine flasks  
from 10ml to 5 litres

**NEW**  
STYLES &  
SIZES

*Simply the  
safest, fastest and  
most efficient way  
of heating and  
stirring a round  
bottom flask*

