



# Heat-On<sup>™</sup> 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and injury from hot oil spills, plus the mess and disposal costs associated with the use of oil, mean that oil baths no longer represent safe or environmentally friendly working practice in labs.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 accepts 10ml, 50ml, 100ml, 150ml, 200ml, 300ml, 500ml, 1 litre, 2 litre, 3 litre and 5 litre round bottom and Florentine flasks...

# ot all blocks designs are the same...

t results show that Heat-On s up to 66% faster and uses 0% less energy than other leading brands of block.

To see the test results, visit ww.radleys.com to download the ew 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

# Heat-On<sup>™</sup> 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

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
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

### 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

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



# Cool-It<sup>™</sup> 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)

(contains 2 cach of the above stirring be

### 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



# Cool-It<sup>™</sup> 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°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...

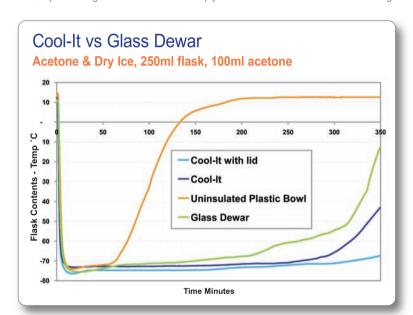
The excellent design and insulation qualities of the Cool-It bowls keep your sample cooler for longer.

- Compared to a standard non-insulated plastic bowl Cool-It will keep your sample below -70°C for up to 5 times longer.
- Compared to a glass dewar Cool-It will keep your reactions below -70°C for twice as long.









## 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 is virtually unbreakable and designed to allow powerful stirring with all leading brands of stirrer including Heidolph, IKA, Eyela 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 ø top plates (e.g. IKA, Eyela, Radleys etc) an optional top plate adapter is available if required.

## Cool-It accessories...

**Prodleus** 

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





Large Cool-It bowl for flasks up to 2 litres





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

