



Heating Blocks

The Stuart range of heating blocks have been developed in conjunction with DrySyn to provide the best possible solution for heating round bottom flasks. Combined with the Stuart range of undergrad hotplates and hotplate stirrers, the Stuart heating blocks provide the cleanest and safest method for synthesis for single or multiple reactions, whilst giving equal or better heating performance than silicon oil.



Stuart range of heating blocks

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The modular nature of the Stuart heating block system gives you the greatest degree of flexibility, two sizes of base plates are available to accommodate up to three blocks each, SHB100BASE can take blocks for up to 100ml flasks while the SHB250BASE accepts blocks for up to 250ml flasks. Handy cost saving starter kits are also available, combining the base plate with a selection

of blocks to get you up and running. All block sizes are also available separately in packs of three.

For larger volume reactions a third base plate is available, the SHB1000BASE accepts a single insert for up to 500ml and also includes heat resistant handles for safe and easy lifting.

The high quality anodised blocks offer excellent chemical and solvent resistance, and the low well has been proven to offer excellent temperature transfer without compromising your view of the reaction or risking cracking the glassware. The low well also ensures that the blocks are compatible with multi neck flasks.



Multiple flasks

The Stuart Undergrad hotplates are provided with an integrated fitment for a standard retort rod, this combined with the three position accessory clamp provides the most effective way of securely holding multiple flasks simultaneously. Accessory clamps are available in two sizes to offer the best fit for both base plate sizes.

Easy to adapt

Stuart heating blocks are compatible with the undergrad range of hotplates, and each block includes a probe hole to house the Stuart SCT1 temperature controller probe, allowing accurate control of the block temperature whilst on the Stuart hotplate.



Tailored to suit your requirements

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Choose a base

Up to 100ml base

SHB100BASE



Up to 250ml base

SHB250BASE



Up to 500ml base

SHB1000BASE



Choose your inserts

5ml insert

SHB5ML



10ml insert

SHB10ML



25ml insert

SHB25ML



50ml insert

SHB50ML



100ml insert

SHB100ML



250ml insert

SHB250ML



50ml large insert

SHB50C*



100ml large insert

SHB100C*



250ml large insert

SHB250C*



500ml insert

SHB500C*



Choose an accessory

Small 3-position clamp

SHB100CLAMP



Medium 3-position clamp

SHB250CLAMP



Temperature Controller

SCT1



Starter kits to get you up and running

Handy cost saving starter kits are also available, combining the base plate with a selection of blocks to get you up and running. All block sizes are also available separately in packs of three.

Also available

9 Part Heating block kit

SHB100KIT9

Including

- 1x SHB100BASE base plate
- 3x 25ml insert
- 3x 50ml insert
- 3x 100ml insert



6 Part Heating block kit

SHB250KIT6

Including

- 1x SHB250BASE base plate
- 3x 100ml insert
- 3x 250ml insert



Large Heating block kit

SHB1000KIT

Including

- 1x SHB1000BASE base plate
- 4x Adapters for 50ml, 100ml 250ml and 500ml inserts



Key Features

- Accurate liquid temperature control
- Built in retort fitting and probe holder
- Detachable temperature probe
- Bright, easy to read LED display
- Compact and light weight
- Comprehensive range of accessories

Temperature control

All hotplate models are compatible with the Stuart® SCT1 temperature controller. In conjunction with your Undergrad hotplate the SCT1 ensures accurate temperature control of heating blocks, aqueous or oil based samples, up to a maximum of 200°C. The units automatically detect when the SCT1 temperature controller is plugged in.

Providing reassurance that the temperature of the sample is precisely controlled at all times. A range of accessories is also available to allow for a complete set up of controller, temperature probe and stirrer hotplate.

Accessory retort rod

Screws in to the rear of all models of hotplates and hotplate stirrers.



Undergrad Hotplates

The Stuart® range of Undergrad hotplates includes dedicated hotplates and stirrers as well as combination hotplate stirrer models, the majority of which are available in a choice of ceramic or coated metal tops. All surfaces are square to allow more flexibility in vessel sizes and combinations, for example four 250ml beakers can easily be accommodated.

Stuart introduces the stylish and economical range of Undergrad, general purpose hotplate stirrers. The Undergrad range has been designed with safety as well as performance in mind, with an innovative LED temperature indicator scale and a "Hot" warning light which stays on, even when the hotplate is switched off and unplugged from the mains.

The specifically designed chassis takes up less bench space, makes storage easier and allows for a retort base to fit underneath.

Key Features

- LED temperature indicator
- Choice of glass ceramic or ceramic coated metal surface
- Hot warning light, remains active even when unplugged
- Compact design to save bench space
- Units can be stored on side, minimising required storage space
- Design allows retort base to slide underneath
- Compatible with SCT1 temperature controller



Choice of surfaces

The hotplates and hotplate stirrers come with a choice of surfaces; available in a choice of ceramic or coated metal tops, all surfaces are square to allow more flexibility in vessel sizes and combinations.

Glass Ceramic surface

Glass ceramic for excellent chemical resistance. The surface is easy to clean and the thermal properties allow very high plate temperatures, while ensuring the edges stay cooler, reducing the chance of accidental burns. The white surface ensures good visibility of colour changes, for example during titrations.

Ceramic coated surface

Ceramic coated Aluminium/silicon alloy for robustness. The top plate has a thin ceramic coating for added chemical resistance. A 700W element gives rapid heating and ensures even temperature distribution across the whole surface of the plate.

Stainless Steel Surface

Robust Stainless steel (US151 only), for accurate stirring. This surface won't produce eddy currents like aluminium and ensure a very powerful coupling and stirring action on our dedicated stirrers.

Safety in design

For safety all units have been designed to direct any spills away from the user controls. A mains switch is standard (excluding Stir only models) for greater convenience and power saving. All units incorporate the latest technology, microprocessor controlled, dual thermocouples to ensure accurate temperature control and over temperature protection.

Power

Powerful magnets and motor give stirring speeds up to 2000rpm and are capable of mixing large volumes (up to 15 litres)



LED Temperature indicator

All hotplate models in the Undergrad range feature a true °C temperature setting, rather than a 1 to 10 arbitrary scale. The LED temperature indicator surrounds the heater control knob and progressively illuminates to indicate the actual surface temperature. This not only provides a bright, obvious indication that the unit is hot, which can be seen from across the room, but also clearly differentiates the heat and stir controls.

Retort rod

The entire range of hotplate stirrers feature an integral fitting for a retort rod, but the units are also uniquely designed to allow a retort base to slide underneath, saving valuable time where numerous units need to be set up, for example in an educational environment.

Hot warning light

All hotplate models feature a "Hot" warning light, which will flash once the hotplate surface reaches 50°C. The "Hot" light will continue to flash even once the unit has been switched off and unplugged from the mains, until the surface temperature drops below 50°C.

Design – storage

The Undergrad range has been designed with ease of use in mind, the case has been designed so the units can be easily stored on their side, minimising the required storage space. The units also have a compact footprint to take up less bench space.

Ordering Information

Model	Description
SHB100KIT9	Stuart heating blocks kit: including flat base plate SHB100BASE and (3 x 25ml SHB25ML), (3 x 50ml SHB50ML) and (3 x 100ml SHB100ML) inserts.
SHB100KIT3	Stuart heating blocks kit: Base + (1 x 25ml), (1 x 50ml) and (1 x 100ml) inserts
SHB250KIT6	Stuart heating blocks kit: including flat base SHB250BASE (3x250ml SHB250ML) and (3x100ml SHB100ML) inserts.
SHB250KIT3	Stuart heating blocks kit: including base SHB250BASE + (3x250ml SHB250ML) inserts
SHB100BASE	Stuart heating blocks flat base, up to 100ml
SHB250BASE	Stuart heating blocks flat base, up to 250ml
SHB5ML	Stuart heating blocks 5ml inserts, pack of 3
SHB10ML	Stuart heating blocks 10ml inserts, pack of 3
SHB25ML	Stuart heating blocks 25ml inserts, pack of 3
SHB50ML	Stuart heating blocks 50ml inserts, pack of 3
SHB100ML	Stuart heating blocks 100ml inserts, pack of 3
SHB250ML	Stuart heating blocks 250ml inserts, pack of 3
SHB100CLAMP	Stuart 3-position Clamp for use with SHB100BASE
SHB250CLAMP	Stuart 3-position Clamp for use with SHB250BASE
SHB1000KIT	Stuart large heating blocks kit: including 1000ml flat base and 4 adapters for 50ml, 100ml, 250ml and 500ml.
SHB1000BASE	Stuart large heating block base only
SHB50C	Stuart large heating block 50ml insert*
SHB100C	Stuart large heating block 100ml insert*
SHB250C	Stuart large heating block 250ml insert*
SHB500C	Stuart large heating block 500ml insert*

* Only compatible with SHB1000BASE

Also available from Stuart Equipment

Model	Description
UC152	Stirrer/hotplate, ceramic plate, 230V / 50Hz
UC152/120V/60	Stirrer/hotplate, ceramic plate, 120V / 60Hz
US152	Stirrer/hotplate, coated aluminium plate, 230V / 50Hz
US152/120V/60	Stirrer/hotplate, coated aluminium plate, 120V / 60Hz
UC150	Hotplate, ceramic plate, 230V / 50Hz
UC150/120V/60	Hotplate, ceramic plate, 120V / 60Hz
US150	Hotplate, coated aluminium plate, 230V / 50Hz
US150/120V/60	Hotplate, coated aluminium plate, 120V / 60Hz
UC151	Stirrer, ceramic plate, 230V / 50Hz
UC151/120V/60	Stirrer, ceramic plate, 120V / 60Hz
US151	Stirrer, stainless steel plate, 230V / 50Hz
US151/120V/60	Stirrer, stainless steel plate, 120V / 60Hz
SCT1	Digital temperature controller
SCT1/1	Accessory probe holder
SCT1/2	PTFE temperature probe
SR1	Retort rod, 600mm x 12mm diameter



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.