









# Introduction

Vitl Life Science Solutions specializes in the design, development, and manufacture of high-end laboratory and analytical instruments. From bestselling microplate heat sealers to a collection of programmable mixers, shakers, vortexers, and readers, Vitl products are suitable for a breadth of applications, including ELISA and DNA isolation enzymatic reactions and sample incubation.

We are committed to supplying world-leading products to the life science industry with a growing portfolio that is highly regarded for its durability, reliability, and efficiency. Our products are available through a network of distributors and trusted OEM partners who ensure we meet the needs of our global customers.

With an unrivaled level of sample care, usability, and repeatability, Vitl products are used in laboratories worldwide including the National Institutes of Health (NIH), Mayo Clinic, and the New York State Department of Health.

As a member of ITL (a G&H company), we benefit from over 40 years' design and manufacturing experience of our parent company. With facilities in the UK, US, and China, we can provide global support to our customers and distributors.



# **VTS**<sup>®</sup>

The Variable Temperature Heat Sealer (VTS) offers maximum flexibility without compromising on sealing quality. Stable heat-sealing performance ensures one-time sealing, preventing sample loss through evaporation and cross-contamination between wells.

# **Features:**

- Adjustable sealing temperature & time
- 125 to 200°C seal temperature
- Unique ergonomic design
- Stable heat-sealing performance to ensure one-time sealing
- Audible indication when sealing complete
- Fast warm-up time



Choose from our wide range of heat seals, including clear, peelable, pierceable, and solvent-resistant seals. See pages 6 and 7.

The VTS requires at least one adaptor for correct operation. Adaptors are sold separately.

Product Information	Product Code
VTS Adaptor Plate 1 - Skirted plates	V902003
VTS Adaptor Plate 2 - 96-well semi-/unskirted plates	V902004
VTS Adaptor Plate 3 - Deep-well plates	V902005





# MicroTS

The MicroTS is a compact, fixed temperature manual heat sealer. It is ideal for use in low to medium throughput laboratories where space is limited, but speed and reliability are paramount.

Perfect for use behind glass safety cabinets.

# **Features:**

- Fixed 170°C seal temperature
- Fast warm-up time
- LED status lights
- · Lightweight (only 4kg)
- Ergonomic design
- Perfect for use behind glass safety cabinets
- Compact unit with a small footprint



The MicroTS requires at least one adaptor for correct operation. Adaptors are sold separately.

Product Information	Product Code
MicroTS Adaptor Plate C - Skirted plates	V903003
MicroTS Adaptor Plate B - 96-well semi-/unskirted plates	V903004
MicroTS Adaptor Plate A - Deep-well plates	V903005



Our heat sealers are designed to deliver consistent and effective sealing for various microplates during sample storage, shipping, and PCR.



# Heat Seals

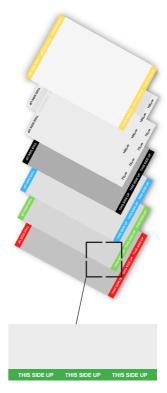
Find the perfect seal for your application with our extensive range of microplate heat seals. Ideal for long-term storage and shipping, they provide optimum protection for your samples. To achieve the best results, use the VTS and MicroTS heat sealers.

# **Features:**

- Color-coded for easy identification
- 125mm x 80mm seals
- All seals are available in standard packs of 100 sheets
- Range of seals including optically clear, peelable, pierceable, and DMSO-resistant
- Custom reels of seals for automated heat sealers are available on request
- "This Side Up" markings to avoid incorrect sealing

# **Applications:**

- PCR
- Sample storage
- Sample archiving
- Sample shipping





# Heat Seals Guide

Color	Catalogue Number	Product Descriptions	Solvent Resistance	Seal Integrity Range °C	Peelable/ Pierceable	Plate Compatibility
Red	7901001	A peelable foil seal with the highest solvent resistance	Excellent, DMSO	-80 to +80°C	Peelable	PP, PE, COC
Green	V901002	Resistant foil seal suitable for a wide range of purposes	Good, DMSO	-20 to +120°C	Pierceable	PP, PS
Blue	V901003	A high-grade, pierceable & peelable foil seal with good solvent resistance	Good, DMSO	-20 to +110°C	Pierceable, Peelable to PS plates	PP, PS
Black	V901004	A strong bonding foil, best for water thermocyclers & hazardous materials	Good, DMSO	-200 to +110°C	Peelable	PP, PS
Clear 75µm	V901005	An optically clear, pierceable film with moderate solvent resistance	Moderate	-80 to +80°C, or 110 with pressurized PCR heated lids	Pierceable	PP, PE, PS, COC
Clear 105µm	7901006	An optically clear, peelable film with moderate solvent resistance	Moderate	-80 to +180°C, or 110 with pressurized PCR heated lids	Peelable	PP, PE, PS, COC
Yellow	7901008	A peelable foil laminate with a large temperature range for all plate types	Good, DMSO	-80 to +110°C	Peelable	PP, PE, PS, COC

Not sure which heat seal is right for you? Contact us for a free sample pack



### Product code: V201001 & V201002

# Esy-Pik

Moving a sample can be unpredictable. The Esy-Pik is a low-cost tube picker that allows for the secure, single-handed removal of 8.5mm microtubes and cryotubes. The eject button allows for minimum contact with sample tubes, minimizing the risk of heat transfer and cross-contamination of samples. Perfect for use when transferring samples to and from the Heated Modules.



# **Features:**

- Single-handed operation
- Easy-grip and lightweight
- Temperature- and chemical-resistant tube contact area
- Eject button for easy retrieval and placement
- Reduces risk of sample contamination
- Reduced heat transfer to minimize the risk of the thawing of frozen tubes
- Suitable for use with laboratory gloves



A laboratory essential for any lab, the Esy-Pik can be customized to meet your specifications. Contact us to learn more!



### Product code: V101001



The Co-mix is a 3-in-1 mixer and vortexer that provides fast and efficient mixing and vortexing of small volumes in all standard vessel formats up to 50mL. It is fully programmable, allowing you to set up advanced, multi-step protocols with variable ramp rates, mixing times, and speeds. The Co-mix ensures data accuracy and the best repeatability by removing the chance of human error and other third-party variables.



The Co-mix comes with a set of 3 adaptors as standard.

### **Features:**

- Choose from pre-defined mixing protocols or create your own with the touchscreen user interface
- 200 3000 rpm mixing; 700 3500 rpm vortexing
- 3mm mixing and vortexing orbit
- Compatible with all standard vessel formats up to 50mL
- Equipped with shock absorbing feet for quiet and discreet mixing
- Samples are secured by automated holders to significantly reduce the risk of lid-wetting
- Simultaneous microplate mixing and tube vortexing function





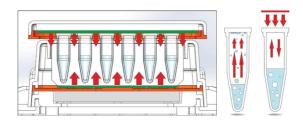
Heated Medule

Optimize flexibility and performance with our range of interchangeable heat modules, designed for use with the Ther-mix thermal mixer and the Flexi-therm dry block heater. All Heated Modules are pre-calibrated with a built-in heated lid to provide the highest level of direct contact with the sample.



# **Features:**

- The built-in lid and the base have two independent heat sources, significantly reducing condensation and evaporation
- Each module is molded around the samples to ensure the highest level of direct sample contact
- Pre-calibrated to provide the highest temperature accuracy
- Temperature accuracy +/-1°C
- Temperature uniformity: 0.5°C/1% of the target temperature
- Heated Modules are designed for use with Ther-mix and/or Flexi-therm base units





Heated Module 01 0.5mL conical Tube x 24 V104001



Heated Module 05 50mL Conical Tube x 4 V104005



Heated Module 02 1.5mL Conical Tube x 24 V104002



Heated Module 06 96-Well PCR Plate, 0.15mL (skirted, semi & unskirted) V104006



Heated Module 03 2.0mL Round Tube x 24 V104003



Heated Module 07 96-Well PCR Plate, 0.25mL (skirted, semi & unskirted) V104007



Heated Module 04 15mL Conical Tube x 8 V104004



Heated Module 09 0.2mL PCR Tube x 96 V104009

If you are unsure of which module will work best for you, please contact us, or send us a sample of your consumable for testing.

The Heated Modules cover most standard sample formats, but we can design bespoke modules based upon your requirements.

# Ther-mix

The Ther-mix provides competitive temperature uniformity and accuracy to ensure reliability and reproducibility for your samples. It is a fully programmable thermal mixer that allows you to create and store your custom protocols with variable temperatures, mixing times, speeds, and ramp rates. When combined with the Heated Modules, the Ther-mix provides you with the confidence to consistently trust the quality of your sample preparation.



## **Features:**

- Create and store 100+ mixing and heating protocols using the LCD touch-screen interface
- Temperature range: Ambient 105°C
- Time range: 5 seconds to 28 days
- 3mm mixing orbit at 200 to 3000 rpm
- Equipped with Sorbothane feet for quiet and discreet mixing
- Interchangeable Heated Modules support various sample tubes and PCR microplates





# Flexi-therm

Maximize your workbench space with our compact dry block heater, Flexi-therm. Coupled with our range of interchangeable Heated Modules, the Flexi-therm combines superb temperature control and uniformity with high-quality design and versatility, making it ideal for sample preparation and incubation. The Flexi-therm combines superb temperature control and uniformity with high-quality design and versatility, making it ideal for sample preparation and incubation.



### **Features:**

- Precise temperature control for safe sample handling
- Visual countdown timer and audible alert on completion to prevent overheating
- Compact unit with a small footprint
- Memory function for previously used settings
- Temperature uniformity and accuracy +/-1°C
- Interchangeable Heated Modules support various sample tubes and PCR microplates.

Vitl Life Science
Solutions heating and
mixing range focuses
on highly controlled
and accurate sample
preparation.



In luminometry, sensitivity, reproducibility, and flexibility are key features that aren't always affordable. Our single-tube luminometer, Lu-mini, was designed to meet these industry needs. It is designed with a unique sample chamber to accommodate consumables without the need for an adaptor, and with the included PC software, it provides data synchronization and in-depth data analysis to better optimize your assay protocols. The Lu-mini is the perfect balance of sensitivity, flexibility and affordability.





### **Features:**

- Limit of detection: 1.7x10<sup>-15</sup> (1.7 femtomoles of ATP<sup>1</sup>)
- Detector: Solid-State
- Lightweight, portable and USB-powered
- Directly accepts 10-15mm round tubes and vials and 10mm square cuvettes
- Fast reading time with optional integration phase
- Easy and versatile protocol selection including single/dual point, peak detect, and kinetic
- Plug-and-play usability with an LCD touch-screen user interface
- USB connectivity for data transfer and configuration via the included PC app



<sup>1</sup>Tested with BioThema 12-101 ATP Reagent HS in BioThema 24-101 Diluent D: A flash emitting reagent with a decay rate of around 12 % per minute.

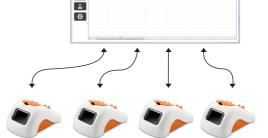


# **Lu-mini App**

The included PC software provides data synchonization and in-depth data analysis to better optimize your assay protocols

- Create and define custom protocols and assays
- Two-way data synchronization
- Test results database
- Manage and sync multiple units





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# **Custom protocol definition**

- Read mode selection including single/dual point, peak detect, and kinetic
- Assay definition

# **Data configuration and analysis**

- Single and multiple tube measurements
- Result comparison banding

# **Applications**





DNA probe assays

Mycoplasma detection





And more...

Luminescent immunoassay (LIA)





Product Information	Product Code
VTS Heat Sealer - Variable Temperature Sealer	V902001
VTS Adaptor Plate 1 - Skirted plates	V902003
VTS Adaptor Plate 2 - 96-well semi-/unskirted plates	V902004
VTS Adaptor Plate 3 - Deep-well plates	V902005
MicroTS Heat Sealer - Fixed Temperature Sealer	V903001
MicroTS Adaptor Place C - Skirted plates	V903003
MicroTS Adaptor Place B - 96-well semi-/unskirted plates	V903004
MicroTS Adaptor Plate A - Deep-well plates	V903005
Red Heat Seals - "The Solvent-Resistant Seal"	V901001
Green Heat Seals - "The Multipurpose Seal"	V901002
Blue Heat Seals - "The High-Grade Seal"	V901003
Black Heat Seals - "The Heavy-Duty Seal"	V901004
Clear 75µm Heat Seals - "The Pierceable Clear Seal"	V901005
Clear 105µm Heat Seals - "The Peelable Clear Seal"	V901006
Yellow Heat Seals - "The Most Versatile Seal"	V901008

Product Information	Product Code
Co-mix - 3-in-1 mixer & vortexer	V101001
Heated Module 01 - 0.5mL Conical Tube x 24	V104001
Heated Module 02 - 1.5mL Conical Tube x 24	V104002
Heated Module 03 - 2.0mL Round Tube x 24	V104003
Heated Module 04 - 15mL Conical Tube x 8	V104004
Heated Module 05 - 50mL Conical Tube x 4	V104005
Heated Module 06 - 96-Well 0.15mL PCR Plate	V104006
Heated Module 07 - 96-Well 0.25mL PCR Plate	V104007
Heated Module 09 - 96-Well 0.2mL PCR Tube x 96	V104009
Ther-mix - Dry block thermal mixer	V102001
Flexi-therm - Dry block heater	V103001
Lu-mini - Single-tube luminometer	V301001
Microtube Esy-Pik - tube-picker for 8.5mm microtubes	V201001
Cryotube Esy-Pik - tube-picker for cryotubes ≤12.5mm cap	V201002

# Trust Vitl to improve your results.

We believe that your results should not be limited by lab equipment. That's why we have designed our products to compete and surpass the industry's top brands, providing instant efficiency and repeatability for each step of the sample preparation process, from start to finish. So, when you trust Vitl products, you are trusting your results.



All Vitl products can be customized to meet your needs.

Contact us for more information.

Find us on Twitter and LinkedIn:



@VitlProducts



linkedin.com/company/ vitl-life-science-solutions

vitlproducts.com

"I can say that I did the maximum to maintain reproducibility and minimize the human-handling factor – and my results are the proof of it."

Filip Kunc
Postgraduate Researcher,
University of Kent







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