



### Laser-Verified, Affordable Accuracy Plus Exclusive Features Only Found in Higher Priced Plates!

These Velp / Chemglass Digital Magnetic Hot Plates are our most advanced hot plate stirrers offering supreme performance, superior safety features and ease-of-use. The connection with the external temperature probe Pt100 and digital thermoregulators VTF and VTF EVO ensures top class versatility meeting all temperature accuracy requirements.

## Designed for Performance

- · High contrast, bright white LED and illuminated icons
- · Industry leading magnetic strength
- Fast and precise heating and regulation up to 370°C
- 135mm diameter CerAlTop™ ceramic coated, aluminum alloy heating surface
- Torque compensation maintains set RPM based on viscosity changes
- Extremely accurate from 30-1700 rpm
- · Set times from 1min to 99h:59min
- · Service Life Meter tracks service intervals or service lifetime
- · Auto reverse of the stirring direction to ensure better mixing

### Engineered for Safety

- · Overheat protection and adjustable safety temperature circuit
- Probe alarm shutdown if probe is connected but not submersed or inserted in sample
- Power interruption automatically turn "OFF" for stir & heat functions
- · Dedicated safety sensor integrated into the hotplate
- Separate programmable maximum safety temperature
- "Hot" warning flashes while hotplate surface is cooling to below 50°C
- · Designed and manufactured in compliance with CE, CSA and UL standards

### Engineered for Safety and Performance

Digitally controlled magnetic hot plate stirrers have scratch-proof, chemical-resistant, 135mm diameter tops. Integrated timers ensure the hotplate heaters are "OFF" after the elapsed time. TRU-RPM stirring provides highly accurate mixing speeds over the entire RPM range. Operation is simple and intuitive with user-friendly controls and illuminated icons.

# Cloud / WiFi Enabled Digital Hot Plate Stirrer with Probe

### Cloud-enabled data access via PC, smartphone or tablet

- · Safe & effortless connection to the cloud via WiFi
- · Real time monitoring notification via VELP Ermes Cloud
- Immediate software updates (OTA)
- · Create and share reports, track trends, gain insight
- · Stop your reaction remotely . . . for maximum safety
- Three-year warranty

# Cloud / WiFi Enabled Digital Magnetic Hot Plate Stirrer with Probe

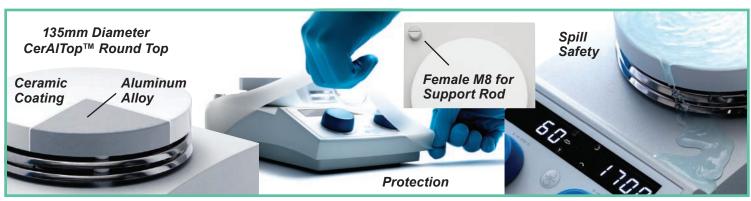
Part No.	Description /	Price
CG-1997-W-10	AREX-6 Connect PRO System, Cloud-Enabled Hot Plate Stirrer with Timer and PT100 Probe 115V/60Hz, Complies with CE, CSA and UL Standards	, <b>\$907.00</b> *
CG-1997-W-50	AREX-6 Connect PRO System Kit, Cloud-Enabled Hot Plate Stirrer with Timer, PT100 Probe, Vertical Support Rod, Boss Head, and Support / Holding Rod, 115V 50/60 Hz, Complies with CE, CSA and UL Standards	\$950.00 *

# Digital Hot Plate Stirrer with Probe

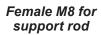
### All the same features but without Cloud Wi-Fi Capability

An the Same reactives but without Cloud Wi-11 Capability					
Part No.	Description	Price			
CG-1997-V-10	AREX-6 Hot Plate Stirrer with Timer and PT100 Probe, 115V 50/60 Hz, Complies with CE, CSA and UL Standards	\$775.00 *			
CG-1997-V-50	AREX-6 Hot Plate Stirrer Kit with Timer, PT 100 Probe, Vertical Support Rod, Boss Head, and Support / Holding Rod, 115V 50/60 Hz, Complies with CE, CSA and UL Standards	\$830.00*			











Connection for optional thermoregulator



Optional silicone cover CG-1995-V-70

# Analog Magnetic Hotplate Stirrer, 135mm Diameter Round Top

**Three-Year Warranty** 



**Optional** 

thermoregulator

# Engineered for Performances & Usability

- PID software controlled thermoregulation for fast, accurate and stable temperature control
- Maximum temperature control up to 370°C
- Extremely powerful brushless motor able to stir from 30 up to 1700 rpm
- The torque compensation technology maintains rpm as viscosity changes
- The Alnico magnet provides state-of-the-art magnetic coupling and guarantees superior peripheral stirring
- · Accepts up to 20 liter flasks
- Versatility and improved productivity
- Connection for digital thermoregulators for direct temperature control of the sample with 0.5°C temperature accuracy
- The digital thermoregulator upgrades performance to the exclusive features of digital hot plate stirrers
- Designed and manufactured in compliance with CE, CSA and UL standards

# Superior SAFETY Features

- On / Off heating switch is illuminated to prevents unintentional heat up
- Heat icon illuminates when the top plate temperature is above 50°C
- · Resistant die-cast housing (IP 42) for maximum protections of internal parts
- Fast heating CerAlTop™ plate is chemical-resistant and scratch-proof
- · Stirring speed ramps up gently, avoiding spillage risks
- · Optional silicone cover protects the stirrer from spills

### **Analog Magnetic Hot Plate Stirrer**

Part No.	Description	Price
CG-1996-V10	AREX-6 Analog Hot Plate Stirrer, 115V 50/60 Hz, Compliance with CE, CSA and UL standards	\$570.0 <b>*</b>
CG-1996-V50	AREX-6 Analog Hot Plate Stirrer Kit with Digital Contact Thermoregulator / Timer and Vertical Support Rod, 115V 50/60 Hz, Compliance with CE, CSA and UL standards	\$933.70 *

CG-1991-P-01

# PIE-BLOCKS for 135mm Diameter Round Top Hot Plate Stirrers

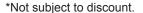
- · Safety pie plate holder keeps up to four pie wedges securely locked together on the hotplate
- Fits all 135mm diameter hot plate stirrers
- Aluminum construction for excellent heat transfer without interfering with magnetic field
- · Interchangeable pie wedges permit various sized vials or flasks on one hot plate
- · Holes are spaced for optimum stirring of all vessels
- Wedges are anodized and color coded for quick and easy identification
- Drilled thermowell for insertion of contact thermometer or temperature sensor

### Custom configurations are available. Please contact us for details.

Part No.	Description	Price
CG-1991-P-01	Complete PIE-BLOCK System with Holder includes: CG-1991-P-05, CG-1991-P-10, CG-1991-P-11, CG-1991-P-12, CG-1991-P-13, CG-1991-P-14 and CG-1991-P-15	\$431.80*
CG-1991-P-05	PIE-BLOCK Safety Holder ONLY, for 135mm Circular	\$80.60*
	Hot Plates, Green	

### Individual Pie Wedges for Vials and Flasks

Part No.	Included in Complete System	No. of Places	Vol. (mL)	Vial Dims. (mm)	Color	Hole Depth (mm)	Price
Wedges for Sc	intillation Vic	ıls					
CG-1991-P-10	yes	4	20	28 x 60	black	24	\$61.50 *
CG-1991-P-11	yes	4	30	28 x 73	green	30	\$67.35 *
CG-1991-P-12	yes	4	40	28 x 98	orange	43	\$72.60 *
Wedges for Dr	am Vials						
CG-1991-P-13	yes	9	4 (1 dr)	15 x 45	gold	19	\$75.35 *
CG-1991-P-14	yes	8	8 (2 dr)	17 x 60	blue	25	\$72.85 *
CG-1991-P-15	yes	4	16 (4 dr)	21 x 70	red	32	\$67.35 *
Wedges for Mi	icrowave Via	ı <b>ls</b> (NOTE	E: CG-19	91-P-23 is	s a taper	ed vial)	
CG-1991-P-19	no	8	2-5	_	turq.	_	\$76.30 *
CG-1991-P-20	no	4	10-20	_	berry	_	\$73.60 *
CG-1991-P-23	no	8	0.5-2	_	purple	_	\$92.00*
Wedges for Ro	ound Bottom	Flasks					
CG-1991-P-30	no	1	10	_	gold	_	\$90.20 *
CG-1991-P-32	no	1	25	_	blue	_	\$92.20 *
CG-1991-P-34	no	1	50	_	red	_	\$94.35*
CG-1991-P-36	no	1	100	_	black	_	\$96.30 *

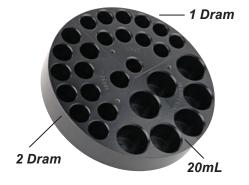






- · Aluminum construction provides excellent heat transfer while not interfering with the magnetic field
- · Holes spaced for optimum stirring of all vials
- · Color-anodized for strength, durability, chemical resistance and easy identification
- Fit directly on 135mm diameter round top, hot plate stirrers
- · Thermowell for insertion of a PT-100 temperature sensor or contact thermometer





Each section of the TRI-BLOCK is engraved with the vial size

# Reaction TRI-BLOCK™ Holds 1 Dram, 2 Dram & 20mL Scintillation Vials

Versatile, TRI-BLOCK fits the most common vial sizes on one hot plate: 11 each of 1 Dram vials, 11 each of 2 Dram vials, 7 each of 20mL vials.

Part No.	Description	Price
CG-1991-T-10	TRI-BLOCK Reaction Block fits 1 Dram, 2 Dram	\$306.90 *
	and 20mL Scintillation Vials, Black Hard Coated Aluminum	



# Single-Size Vial Reaction Blocks

Part No.	No. of Places	Vol.	Vial Dims. (mm)	Color	Hole Depth (mm)	Price
CG-1991-01	17	20 mL	28 x 60	black	24	\$204.00 *
CG-1991-02	17	30 mL	28 x 73	green	30	\$221.70 *
CG-1991-03	17	40 mL	28 x 98	orange	43	\$226.50 *
CG-1991-04	48	1 dram	15 x 45	gold	19	\$256.10 *
CG-1991-05	34	2 dram	17 x 60	blue	25	\$249.10 *
CG-1991-06	21	4 dram	21 x 70	red	32	\$231.35 *

**Custom Blocks** Available!

# Reaction Heating Block for 5mm NMR Tubes

- · Offers a clean and safe alternative for heating NMR tubes in oil baths
- · Eliminates hassle of removing oil residue from outside of NMR tubes
- · Aluminum construction offers excellent heat transfer
- Ideal for performing kinetics studies where you run a standard reaction in NMR tube and run an NMR every 10-20min to see conversion of chemicals
- · Easily perform degradation studies on chemicals and monitor on the NMR

NMR Heating Reaction Blocks are designed to rest on round or square top hot plate stirrers. They're ideal replacements for oil baths. They provide a safe and clean method for preheating NMR tubes and performing kinetics and degradation studies in 5mm NMR tubes. Blocks are anodized aluminum. A thermowell is included on each for insertion of a temperature sensor.

Part No.	Description	Price
CG-1991-N-10	Reaction Heating Block, Anodized Clear, Fits (10) 5mm NMR Tubes	\$254.60 <b>*</b>

### NORELL™ 5mm Valved NMR Tubes

- · Greaseless PTFE assembly
- · Eliminates flame-sealing of tubes
- · Principally intended for vacuum work

NORELL Valved NMR Tubes feature a completely greaseless PTFE assembly, which is easy to use and disassemble for cleaning. It includes a female joint for quick attachment to your vacuum rack for handling your NMR samples without flame-sealing the tubes. A PTFE covered o-ring eliminates material incompatibilities.

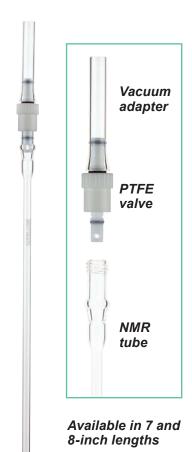
A vacuum level of 10-7 kPa (10-6 torr) can be attained with this valve. While this valve can also withstand an internal positive pressure to 500 kPa (5 bar, 72 psi), the VT Valved NMR Tube series is intended principally for vacuum work. When pressurizing internally (by heating the NMR tube, for instance), the valve must be fully closed, so that the female vacuum adapter joint (the short glass tube that slips over the top of the PTFE valve stem, sealing against the upper o-rings) cannot be used to apply or be exposed to a positive pressure.

### Norell Valved NMR Tubes

Part No.	MHz	Length (in.)	Price
C-S-5-300-JY-7	300	7	\$176.20 †
C-S-5-300-JY-8	300	8	\$157.20 †
C-S-5-400-JY-7	400	7	\$183.30 †
C-S-5-400-JY-8	400	8	\$187.00 †
C-S-5-500-JY-7	500	7	\$185.30 †
C-S-5-500-JY-8	500	8	\$200.95 †
C-S-5-600-JY-7	600	7	\$197.30 †
C-S-5-600-JY-8	600	8	\$200.20 †

† reusable glass and plastic \*Not subject to discount.







PTFE shields reduce exterior exposed temperatures





# OptiTHERM® Reaction / Heating Block Shields and Inserts

OptiTHERM aluminum reaction / heating blocks provide a safe and cost effective solution for replacing your existing oil baths and heating mantles. The innovative PTFE shield reduces the exterior exposed surface temperature by as much as 100°C. For example, the PTFE shield would be approximately 80°C on a 100mL flask that is heated to 180°C.

Three OptiTHERM PTFE blocks are available. Corresponding inserts are available for round bottom and recovery flasks. See tables below for appropriate combinations. The anodized aluminum flask inserts are color coded for easy identification. Designed to fit directly on 135mm diameter circular top hot plate stirrers. US Patent Number 7,494,267.

### Inserts must be purchased separately.

### OptiTHERM Reaction / Heating Block PTFE Shields

Part No.	Description	Price
CG-1992-10	OPT100 RBF Reaction Block, 100mL	\$402.65 *
CG-1992-50	OPT500 RBF Reaction Block, 500mL	\$434.20 *
CG-1992-60	OPT1000 RBF Reaction Block,1000mL	\$566.35 <b>*</b>

### OptiTHERM Anodized Aluminum Inserts for Round Bottom Flasks

Part No.	Round Bottom Flask Size (mL)	Color	Use with	Price
CG-1992-12	10	gold	OPT100	\$80.70 *
CG-1992-14	25	blue	OPT100	\$85.45 *
CG-1992-16	50	red	OPT100	\$91.30 *
CG-1992-54	250	clear	OPT500	\$135.20 *
CG-1992-53	200	turquoise	OPT500	\$135.20 *
CG-1992-55	300	black	OPT500	\$135.20 *
CG-1992-58	500	berry	OPT1000	\$206.35 *

### OptiTHERM Aluminum Inserts for Recovery Flasks

Part No.	Recovery Flask Size (mL)	Color	Use with	Price
CG-1992-R010	10	orange	OPT100	\$86.55 *
CG-1992-R025	25	green	OPT100	\$91.30 *
CG-1992-R050	50	blue	OPT100	\$97.30 *
CG-1992-R100	100	yellow	OPT500	\$143.50 *
CG-1992-R200	200	red	OPT500	\$143.50 *
CG-1992-R500	500	berry	OPT1000	\$205.25 *

# Single Neck, Round Bottom, Heavy Wall Flasks

Round bottom, HEAVY WALL single short neck flask with a standard taper outer joint. The 29/26 flasks have a groove tooled just below the grind to aid in clamping of the flask. Flasks with joint sizes other than those listed are available, please contact us for pricing.

	Сар.	Joint	
Part No.	(mL)	Size	Price
CG-1506-07	2	19/22	\$23.80
CG-1506-10	4	19/22	\$24.00
CG-1506-80	5	14/20	\$21.65
CG-1506-81	5	19/22	\$23.10
CG-1506-13	6	19/22	\$25.00
CG-1506-82	10	14/20	\$22.35
CG-1506-83	10	19/22	\$23.80
CG-1506-84	15	14/20	\$23.00
CG-1506-85	15	19/22	\$23.10
CG-1506-86	25	14/20	\$22.50
CG-1506-87	25	19/22	\$23.10
CG-1506-16	25	24/40	\$23.10
CG-1506-32	35	19/22	\$25.05
CG-1506-88	50	14/20	\$22.50
CG-1506-89	50	19/22	\$22.60
CG-1506-01	50	19/38	\$25.00
CG-1506-02	50	24/40	\$23.10
CG-1506-03	50	29/42	\$29.25
CG-1506-60	50	29/26	\$22.60
CG-1506-22	65	19/22	\$25.00
CG-1506-90	100	14/20	\$22.60
CG-1506-91	100	19/22	\$22.80
CG-1506-04	100	19/38	\$25.50
CG-1506-05	100	24/40	\$23.80
CG-1506-61	100	29/26	\$29.35
CG-1506-06	100	29/42	\$29.35

	Cap.	Joint	
Part No.	(mL)	Size	Price
CG-1506-08	125	24/40	\$29.25
CG-1506-09	125	29/42	\$31.15
CG-1506-11	150	24/40	\$33.75
CG-1506-12	150	29/42	\$35.70
CG-1506-14	200	24/40	\$30.95
CG-1506-62	200	29/26	\$36.10
CG-1506-15	200	29/42	\$36.50
CG-1506-92	250	14/20	\$28.20
CG-1506-93	250	19/22	\$30.25
CG-1506-63	250	29/26	\$35.45
CG-1506-18	250	29/42	\$35.10
CG-1506-17	250	24/40	\$31.65
CG-1506-46	300	24/40	\$35.45
CG-1506-64	300	29/26	\$36.05
CG-1506-47	300	29/42	\$41.00
CG-1506-94	500	14/20	\$38.00
CG-1506-95	500	19/22	\$38.00
CG-1506-20	500	24/40	\$36.65
CG-1506-65	500	29/26	\$39.45
CG-1506-21	500	29/42	\$39.45
CG-1506-31	500	45/50	\$57.55
CG-1506-23	1000	24/40	\$42.70
CG-1506-66	1000	29/26	\$51.50
CG-1506-24	1000	29/42	\$47.45
CG-1506-33	1000	45/50	\$61.70



CG-1506-series



\*Not subject to discount.



CG-1512-series

# Single Neck, Recovery, Heavy Wall Flasks

Evaporating flask for use with rotary evaporators. Flasks have a HEAVY WALL for vacuum applications and are balanced to prevent run-out during rotation. For Plastic Coated flasks, see CG-1512-P on our website.

Part No.	Cap.(mL)	Joint Size	Price
CG-1512-51	10	14/20	\$23.65
CG-1512-52	10	19/22	\$24.05
CG-1512-53	25	14/20	\$23.65
CG-1512-54	25	19/22	\$24.05
CG-1512-55	50	14/20	\$23.65
CG-1512-56	50	19/22	\$24.05
CG-1512-01	50	24/40	\$29.10
CG-1512-02	50	29/42	\$31.45
CG-1512-40	50	29/26	\$31.55
CG-1512-57	100	14/20	\$24.15
CG-1512-58	100	19/22	\$24.70
CG-1512-21	100	24/25	\$30.00
CG-1512-03	100	24/40	\$30.00
CG-1512-04	100	29/42	\$32.10
CG-1512-27	100	29/26	\$32.10
CG-1512-59	200	14/20	\$33.20
CG-1512-60	200	19/22	\$37.00
CG-1512-23	200	24/25	\$41.40
CG-1512-05	200	24/40	\$39.25
CG-1512-06	200	29/42	\$41.40
CG-1512-29	200	29/26	\$41.40
CG-1512-25	500	24/25	\$63.70
CG-1512-07	500	24/40	\$59.35
CG-1512-08	500	29/42	\$63.70
CG-1512-31	500	29/26	\$63.70
CG-1512-09	1000	24/40	\$76.00
CG-1512-10	1000	29/42	\$78.30
CG-1512-33	1000	29/26	\$78.30
CG-1512-35	2000	24/40	\$111.00
CG-1512-37	2000	29/26	\$115.25
CG-1512-39	2000	29/42	\$113.05
CG-1512-42	3000	24/40	\$294.15
CG-1512-44	3000	29/26	\$302.55
CG-1512-46	3000	29/42	\$302.55

See round bottom flasks on previous page



Genevac is a Trademark of Genevac, Ltd.
\*Not subject to discount.

# OptiCHEM® Heater Block Adapter for Vacuum Evaporator Blocks

- Fits all 135mm diameter hot plate stirrers and offers great visibility of reactions
- · Excellent heat distribution
- · PTFE shield prevents potential burns and provides a safe contact area
- Aluminum construction for excellent heat transfer won't interfere with magnets
- Thermowell provided for a contact thermometer or PT100 sensor

Lower edge of block covers side of top plate and prevents block from slipping, allowing for safe heating of your Chemglass or Genevac blocks. PTFE shield on heating block keeps exterior surface area at a temperature that is safe to touch.

Part No.	Description	Price
OP-6700-01	Heater Block Adapter	673.05 *

# OptiCHEM Centrifugal Vacuum Evaporator Blocks for Vials and Tubes

			Vol.		
Part No.	Accommodates	Positions	(mL)	Dims. (mm)	Price
OP-6600-04	shell vials	96	_	8 x 30	\$180.30 *
OP-6600-03	HPLC flat bottom vials	48	_	12 x 32	\$201.05*
OP-6600-05	1 dram flat bottom vials	24	4	15 x 45	\$180.30*
OP-6600-07	2 dram flat bottom vials	24	8	17 x 60	\$180.30*
OP-6600-09	4 dram flat bottom vials	15	16	21 x 70	\$180.30*
OP-6600-11	flat bottom scintillation vials	11	20 30	28 x 57 28 x 70	\$180.30*
OP-6600-12 (two-tier)	flat bottom scintillation vials	11	40 60	28 x 70 28 x 95	\$231.85*
OP-6600-18	Haystack sample vials	24	_	14 mm (OD)	\$181.45*
OP-6600-20 (two-tier)	tapered microwave vials	24	0.5-2	16 x 83	\$231.35*
OP-6600-21 (two-tier)	round bottom microwave vials	24	2-5	16 x 83	\$231.35*
OP-6600-22 (two-tier)	microwave vials	8	20	28 x 83	\$231.35*
OP-6600-30	round bottom tubes	70	_	10 x 75	\$180.40*
OP-6600-34	round bottom tubes	40	_	12 x 75	\$180.40*
OP-6600-36 (two-tier)	round bottom tubes	24	_	13 x 100	\$231.55*
OP-6600-38 (two-tier)	round bottom tubes	24	_	16 x 100	\$231.55*
OP-6600-40 (two-tier)	round bottom tubes	24	_	18 x 100	\$231.55*
OP-6600-42 (two-tier)	round bottom tubes	12	_	25 x 100	\$231.55*

# OptiCHEM Multi-Vial Block, 25-Position Aluminum Block

Part No.	Description	Price
OP-6600-90	Chemical-Resistant, Black, Hard-Coated Aluminum	\$193.00*
	Holds (4) 20-40mL Scintillation Vials, (5) 2 Dram Vials or 2-5mL Microwave Vials, (7) 1 Dram Vials, and (9) 12 x 32mm Autosampler Vials	







# **OptiCHEM Blocks for Vials & Tubes**

For use in centrifugal vacuum evaporators. Designed to maximize evaporation while minimizing the weight of the block and thereby increasing sample volumes. Each block is made of black, hard-coated aluminum for resistance to organic solvents and laser etched with the vial / tube size.



### **OptiCHEM Multi-Vial Block**

Hold vials while transferring solutions or solids. Can also be used in centrifugal vacuum evaporators.







OptiCHEM Block (OP-6600-series)





# OptiBLOCK Parallel Synthesis Reaction Blocks

- Seals multiple vessels effectively
- · Wide range of vessel sizes
- · Provides syringe access to all vessels
- Works at boiling point
- · Glove box and automation friendly
- · Works with aggressive solvents

The OptiBLOCK is a simple, easy to use tool for medicinal and process chemists. The block accepts up to eight different vial sizes and fits directly onto a hot plate stirrer having a 135mm top plate diameter.

# OptiBLOCK Parallel Synthesis Start Up Kit

Part No.	Description	Price		
OP-5000-K1	OP-5000-K1 OptiBLOCK Parallel Synthesis Reaction Block Start Up Kit includes the following:			
	OP-5000-01 (1 ea.) OP-5000-10 (1 ea.) OP-5000-12 (1 ea.) OP-5000-16 (1 ea.) OP-6600-05 (1 ea.) OP-6600-07 (1 ea.) OP-6600-11 (1 ea.) OP-5000-60 (20 ea.)			

### OptiBLOCK Locking Base and Septa Pads

Part No.	Description	Price
OP-5000-01	Reaction Block Locking Base Assembly ONLY	\$770.80 *
OP-5000-60	PTFE-Faced Silicone Septa Pads, Pkg. 10	\$104.60 *

### **OptiBLOCK Top Locking Plates**

Part No.	Accommodates	Dims. (mm)	# of Positions	Color	Price
OP-5000-09	96 Well	8 x 30mm	96	Green	\$225.40 *
OP-5000-10	1 Dram Vial	15 x 45mm	24	Purple	\$225.40 *
OP-5000-12	2 Dram Vial	17 x 60mm	24	Gold	\$225.40 *
OP-5000-14	4 Dram Vial	21 x 70mm	15	Red	\$225.40 *
OP-5000-16	20mL Vial	28 x 57mm	11	Blue	\$225.40 *
OP-5000-17	30mL Vial	28 x 70mm	11	Silver	\$225.40 *
OP-5000-18	40mL Vial	28 x 95mm	11	Orange	\$225.40 *
OP-5000-19	0.5-2mL Tapered Vial or 2-5mL RB Microwave Vial	_	24	Green	\$251.40 <b>*</b>
OP-5000-20	10-20mL Microwave Vial	_	8	Turq.	\$251.40 *

# Reaction Vials with Red Pressure Relief Caps Attached

Reaction vials are perfect for use in heated reactions. Supplied complete with a special pressure relief open top cap. Packed 100 per box.

- Supplied complete with a special open top cap which prevents the pressure in the vial from exceeding 150 psig.
- Made from 33 expansion borosilicate glass which conforms to ASTM E-438 Type 1-Class A, USP Type 1 and ISO 3585. The high resistance to thermal shock along with its maximum chemical resistance makes this the glass of choice for reaction vials along with most all laboratory glassware.
- Packaged in a SBS coated white tray complete with SBS partition. Boxes are marked with alpha-numeric coordinates for fast and easy vial identification.

NOTE: Vials and caps are not available separately; must be purchased complete.

### Clear Vials with Red Pressure Relief Caps

Part No.	Vial Capacity	Vial Dims. (mm)	Thread Size	Qty. / Box	Price
CG-4912-01	1 dram	15 x 45	13-425	100	\$98.25 ▲
CG-4912-02	2 dram	17 x 60	15-425	100	<b>\$106.70</b> ▲
CG-4912-05	20mL	28 x 57	24-414	100	\$115.25 ▲
CG-4912-06	40mL	28 x 95	24-414	100	<b>\$152.85</b> ▲

# **PTFE Vial Funnels**

PTFE funnels screw securely onto any standard laboratory vial having a GPI thread. Design allows for easy, safe and mess-free product transfer.

NOTE: Vials are not included with funnels.

### **PTFE Vial Funnel Kit**

Part No.	Description	Price
CG-1761-20	Funnel Kit, Supplied with a Polypropylene Box and 1 Each of the Eight Funnel Sizes Listed Below	\$146.90 *

### **Individual PTFE Vial Funnels**

Part No.	O.D. (in.)	<b>GPI Thread Size</b>	Price
CG-1761-01	1.0	8-425	\$16.10 *
CG-1761-02	1.0	9-425 and 10-425	\$16.10 *
CG-1761-03	1.0	13-425	\$16.45 *
CG-1761-04	1.4	15-425	\$19.40 *
CG-1761-05	1.4	18-400	\$19.40 *
CG-1761-06	1.9	20-400	\$24.55 *
CG-1761-07	1.9	22-400	\$22.95 *
CG-1761-08	1.9	24-400	\$24.20 *



- reactions
- Engineered to safely release pressure without explosion



▲ Subject to vials / containers discount. \*Not subject to discount.

# CG-1218-F224

Findenser Mini ▶

# Findenser™ Air Condensers with Finned Aluminum Jackets

- · No risk of water leaks and flooding from running water
- · Eliminate the cost of water purchase and disposal
- · Helps meet sustainable water reduction targets
- · For solvent volumes from 5ml up to 1 liter

Findenser combines an internal glass condenser with an external, finned aluminum heat sink jacket. The area between the internal glass condenser and the finned aluminum jacket is filled with a small amount of water that is permanently sealed. The internal design of the glass condenser provides an increased internal surface area compared to traditional condensers. The larger surface area improves the heat transfer capacity of the condenser. The Findenser replaces the need for water cooled condensers in over 95% of all common chemistry applications.

### Findenser Compared with an Air Condenser

For synthesis with 'low' boiling point solvents, Findenser showed a significant improvement in solvent retention. With acetone or DCM the reaction boiled dry when using an air condenser, yet Findenser retained 95% of the solvent under the same conditions.

For synthesis with 'medium' boiling point solvents, Findenser delivered improved solvent retention particularly with larger volumes and high temperatures.

Note: Always ensure vessel and Findenser are clamped. Do not expose to temperatures below 0°C. Do not autoclave. Do not exceed 60°C when oven drying. Do not exceed 50°C when using in a dishwasher.

Patented design. Findenser is a trademark of Radleys.

Part No.	Description	Overall Length (mm)	Joint Size	Price
CG-1218-F114	Findenser Mini	275	B14	\$415.00 *
CG-1218-F124	Findenser Mini	275	B24	\$415.00 *
CG-1218-F224	Findenser	400	B24	\$443.85 *



### How does Findenser work?

- · Findenser combines an internal glass condenser with an external, finned aluminum heat sink jacket
- Internal glass condenser provides increased heat transfer capacity compared to traditional condensers
- Finned aluminum heat sink fits around the glass condenser increasing the external surface area
- · Area between the glass condenser and the finned jacket is permanently filled with a small amount of water



**OptiTHERM®** 

Reaction / Heating

Block - see page 8

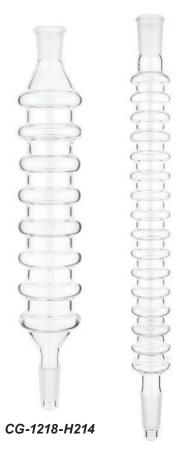
# Water-free, High Efficiency, Air Condensers

High efficiency air condensers are waterless condensers that require no cooling water for operation. The high surface area of the glass bellows design provides for a very effective air condenser.

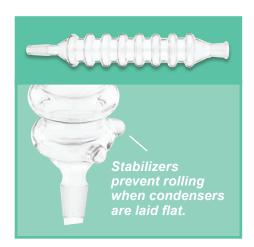
- Performance equivalent to a Liebig-type condenser being used with tap water
- No risks of water leakage, and potential flooding
- · By not using water, the environmental impact and water costs are reduced
- · Considerably less expensive than other waterless condenser options
- · Helps meet sustainable water reduction targets
- · Clear visibility of the reaction reflux
- · Suitable for use under vacuum
- For solvent volumes of 5mL up to 1 liter

Water-free Design: no chiller / circulator needed, eliminate wasting water, no risk of flooding the hood and no fear of water issues affecting the reflux / reaction due to the condenser having reduced or no flow of water.

		Length Between	
Part No.	Joint Size	Joints (mm)	Price
CG-1218-H214	14/20	200	\$246.00 <b>*</b>
CG-1218-H224	24/40	200	\$258.70 <b>*</b>
CG-1218-H324	24/40	350	\$269.25 *
CG-1218-H424	24/40	450	\$277.70 *



CG-1218-H324





# Static, Waterless, Allihn-Style Reflux Condenser

- · No issues with water leakage or potential flooding
- · Environmental impact and water costs are reduced
- Clear visibility of the reaction reflux
- · Suitable for use under vacuum
- · For solvent volumes up to 1 liter
- Considerably less expensive than other waterless condenser options

Static, waterless, Allihn-style reflux condenser with a standard taper outer joint at the top and a lower inner drip tip joint and GPI thread on side for filling the condenser with ethylene glycol. Supplied with open top cap and septa for closing off once the condenser is filled.

NOTE: Ethylene glycol is not supplied.

# Static, Waterless, Allihn-Style Reflux Condenser

Part No.	<b>₮ Joint Size</b>	Jacket Length (mm)	Overall Height (mm)	Price
CG-1206-W214	14/20	100	175	\$184.80 *
CG-1206-W224	24/40	300	420	\$210.10 *

# **Accessory Vial Connecting Adapter**

Part No.	Description	Price
CG-1206-W245	Adapter, Connecting Vial, 14/20, Glass Only	\$37.00 *

See case studies listed at

www.cglifesciences.com



# **Magnetic PTFE Micro Stir Bars**

Micro PTFE stir bars for the smallest containers. Manufactured with FDA-grade and USP Class VI PTFE.

### **Individual PTFE Stir Bars**

Part No.	Length x Dia. (mm)	Price
CG-2003-10	2 x 2	\$5.95 *
CG-2003-11	3 x 3	\$5.85 *
CG-2003-12	5 x 2	\$5.30 <b>*</b>
CG-2003-13	6.35 x 3	\$5.85 <b>*</b>
CG-2003-14	7 x 2	\$5.30 *
CG-2003-15	8 x 1.5	\$5.30 *
CG-2003-16	10 x 3	\$5.85 *
CG-2003-17	12.7 x 3	\$5.85 *
CG-2003-18	15 x 1.5	\$5.20 *



CG-2003-series Individual Bars and 50-Packs

### **50-Packs of PTFE Stir Bars**

Part No.	Length x Dia. (mm)	Price
CG-2003-100	2 x 2	\$137.80 *
CG-2003-110	3 x 3	\$142.45 *
CG-2003-120	5 x 2	\$122.20 *
CG-2003-130	6 x 3	\$135.40 *
CG-2003-140	7 x 2	\$135.40 *

# Magnetic PTFE Micro Stir Bar Kit

Stir Bar Kits are available with an assortment of other styles and sizes. Please contact technical service for more information.

### Micro PTFE Stir Bar Kit

Part No.	Description	Price
CG-2003-50	Stir Bar Kit, Magnetic, PTFE, Micro	\$189.85 *

# Micro Stir Bar Kit Components

Part No.	Length x Dia. (mm)	Qty.
CG-2003-10	2 x 2	3
CG-2003-12	5 x 2	6
CG-2003-13	6.35 x 3	3
CG-2003-14	7 x 2	6
CG-2003-16	10 x 3	6
CG-2003-17	12.7 x 3	3



CG-2003-50 Kit



CG-2005-series



CG-2005-20 Kit



**TURBO** CG-2005T-series

# Egg-Shaped, Magnetic, PTFE Stir Bars

Egg-shaped magnetic stirring bar provides its own pivot point without separate ring or abrupt change in contour. Designed for use in round bottom vessels, it is shaped to spin freely, unrestricted by the vessel contour. Manufactured with FDA-grade and USP Class VI PTFE.

### **Individual PTFE Stir Bars**

Part No.	Fits Flask Size (mL)	Length x Dia. (in.)	Price
CG-2005-10	10-100	3/4 x 3/8	\$10.80 *
CG-2005-11	100- 250	1 x 1/2	\$10.80 *
CG-2005-12	250-500	1 1/4 x 5/8	\$13.60 *
CG-2005-13	300-500	1 1/2 x 5/8	\$14.70 *
CG-2005-14	500-1000	1 5/8 x 3/4	\$18.40 *
CG-2005-15	2000-3000	2 x 3/4	\$22.00 *
CG-2005-16	3000-5000	2 1/2 x 3/4	\$27.65 *
CG-2005-17	12000-22000	3 x 3/4	\$31.55 *
CG-2005-30	5-25	3/8 x 3/16	\$9.35 *

# Egg-Shaped, Magnetic, PTFE Stir Bar Kit

Stir Bar Kits are available with an assortment of other styles and sizes. Please contact technical service for more information.

# Egg-Shaped PTFE Stir Bar Kit

Part No.	Description	Price
CG-2005-20	Stir Bar Kit, Magnetic, Egg-Shaped, PTFE	\$237.25 *

### **Egg-Shaped PTFE Stir Bar Kit Components**

Part No.	Length x Dia. (in.)	Qty.	
CG-2005-10	3/4 x 3/8	6	
CG-2005-12	1 1/4 x 5/8	6	
CG-2005-14	1 5/8 x 3/4	3	
CG-2005-15	2 x 3/4	2	
CG-2005-16	2 1/2 x 3/4	1	

# STIR BARS, MAGNETIC, PTFE, TURBO, RARE EARTH, ELLIPTICAL

Exceptional strength coupled with almost total resistance to demagnetisation. Identified by an inert carbon, black spot.

### **Individual PTFE Stir Bars**

Part No.	Length x Dia. (mm)	Price
CG-2005T-01	10 x 6	\$7.20 *
CG-2005T-02	15 x 10	\$11.30 *
CG-2005T-03	25 x 14	\$15.05 *
CG-2005T-04	50 x 24	\$41.55 *
CG-2005T-05	70 x 28	\$105.70 *

### Heatable PTFE Beaker

- Totally inert, pure PTFE inner surface
- Heatable to 270°C without distortion
- Improved heat transfer

PTFE beakers feature the unique combination of a pure PTFE body with a specially formulated, stabilized PTFE carbon base as a single molding.

### Heatable PTFE Beaker

Part No.	Capacity (mL)	Price
CG-1109H-01	100	\$69.75 *
CG-1109H-02	250	\$82.90 *
CG-1109H-03	400	\$120.15 *

# **Vial Adapter Kit for Rotary Evaporators**

Adapters permit the connection of standard laboratory dram sample vials directly to the vapor tube or a bump trap of a rotary evaporator. Adapters have a top outer joint of the listed size and a 20-400 GPI thread at the bottom. A PTFE-lined, polypropylene, double-threaded connector attaches the vial to the adapter.

### **Vial Adapter Kits**

Part No.	Description	Price		
CG-1318-40	Complete Kit: 24/40 Glass Adapter with All 6 Threaded Vial Adapters: 13-425, 15-425, 18-425, 20-400, 22-400, 24-400	\$142.35 *		
CG-1318-41	Complete Kit: 29/26 Glass Adapter with All 6 Threaded Vial Adapters: 13-425, 15-425, 18-425, 20-400, 22-400, 24-400	\$149.35 *		
CG-1318-42	Complete Kit: 29/42 Glass Adapter with All 6 Threaded Vial Adapters: 13-425, 15-425, 18-425, 20-400, 22-400, 24-400	\$149.35 *		
CG-1318-30	Complete Kit: Threaded Vial Adapters Only: 13-425, 15-425, 18-425, 20-400, 22-400, 24-400	\$106.10 *		

### Individual, Double-Threaded Connectors Only

Part No.	Accommodates Vial Thread	Price
CG-1318-20	13-425	\$14.55 *
CG-1318-21	15-425	\$15.50 *
CG-1318-22	18-425	\$17.20 *
CG-1318-23	20-400	\$17.85 *
CG-1318-24	22-400	\$18.25 *
CG-1318-25	24-400	\$23.80 *
CG-1318-99	Haystack Vial with White PP Cap	\$21.80 *

### **Glass Adapters Only**

Part No.	Standard Taper Joint Size	Price
CG-1318-10	24/40	\$42.50
CG-1318-11	29/26	\$48.10
CG-1318-12	29/42	\$48.10

\*Not subject to discount.



CG-1109H-series







# SAVE SPACE!

Compact footprint compared to square jacks: 12.875 x 7.625 inches



# Recessed top keeps stirrers safely away from edges.

- · Excellent side-to-side rigidity and support
- · Height adjusts from 3 to 15 inches
- Maximum static holding weight of 75 lbs.
- Anodized aluminum and stainless steel construction for durability and strength

Laboratory jack designed specifically for use with rectangular hot plate stirrers like our analog, digital and cloud / wifi enabled models. The narrow, space-saving, design offers a compact footprint compared to traditional,

larger, square lab jacks. Built for strength and durability, the top and bottom plates are chemical-resistant, anodized aluminum and the lift mechanism is made of stainless steel and aluminum. The recessed area in the top plate measures  $6.375 \times 11$  inches with a depth of 0.098 inches.

### Rectangular Lab Jack with Recessed Top Plate

Part No.	Description	Footprint (in.)	Price
CG-3054-H-100	Rectangular Lab Jack	12.875" D x 7.625" W	\$292.15 *

\* Not subject to discount.

Engineered for SAFETY





Height adjustable from 3 to 15 inches.



See hot plate stirrers on pages 2 - 4



Analog CG-1996-V10



Digital CG-1997-V-10



Cloud / WiFi Enabled CG-1997-W-10

# Contact us today!



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