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Dear Reaction Block User,
Two safety precautions must be taken every time you use your Reaction Block.

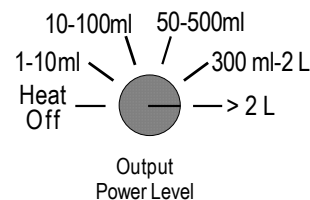
Safety Precautions for using a Reaction Block

- The block is HOT.** The reaction block can heat to 150° C or hotter. Place the block in a shielded area where it will not be touched.
- Table Top Shakers WALK.** Because of the large mass of the reaction block, when they are rotationally shaken a table top shaker can *walk* across a bench top and fall to the floor. All shakers must be secured to the bench top in some fashion to prevent it from moving its' location. Two good methods for securing the shaker are:
 - Screw a small frame to the bench top that the feet of the shaker fit into.
 - Tie the shaker to the back of the hood or bench.
- Applying Power to the Reaction Block.** Reaction blocks are provided with internal 120 vac heaters that are not accessible to the user. □The power cord that comes from the reaction block should be plugged into an instrument that controls the block's temperature by regulating the amount of power applied to the block such as a variac or preferably, a J-KEM digital temperature controller.

Selecting a power level for heating reaction blocks using J-KEM's digital temperature controllers

J-KEM's 200-Series temperature controllers contain our power control computer which allows users to set a power level appropriate to the *task* being heated. Since the power control computer is labeled in terms of volumes (e.g., 10-100ml) it can be confusing what power level to set the controller to when using a reaction block. The volume settings of the power control computer are only intended as a guide when heating liquids in flasks with standard heating mantles. For other heating applications, the power control computer should be set to the setting that reflects your best judgment as to how much power the application requires. The table at the right correlates output power level to volume setting. For reaction blocks the output power level should be set to the "> 2L" setting unless the block is run at temperatures below 50° C where a power setting of "300ml - 2L" is more appropriate.

Model 150 and 150/Timer controllers do not contain the power control computer so the reaction block should be plugged into the controllers outlet without concern for setting a power level.



A power Setting of...	is equivalent to a variac setting of:
1-10ml	3%
10-100ml	10%
50-500%	25%
300ml-2L	50%
>2L	100%

If you have any questions about the safe operation of your Reaction Block or shaker, please give us a call.

Source of Vials for J-KEM's Reaction Blocks

To make using your Reaction Block quicker and easier, listed below are common vials that fit the various blocks. Except where noted, vials are from Alltech Associates (800) 255-8324.

Vials for Heated and Heated/Cooled Reaction Blocks	
Description	Alltech Associates Catalog #. (800) 255-8324
Vials for 2 ml Reaction Block 12 x 32 mm vial with 10/425 thread. Volume of vial: 2ml Septum hole caps with teflon cap liner Solid caps with teflon cap liner	#98133 (15.00/pk of 100) #98705 (23.50/pk of 100) #98124 (13.20/pk of 100)
Vials for 4 ml Reaction Block 15 x 45 mm vial with 13/425 thread. Volume of vial: 4ml Septum hole caps with teflon cap liner Solid caps with teflon cap liner	#98110 (15.50/pk of 100) #98735 (23.80/pk of 100) #98430 (14.50/pk of 100)
Vials for 8 ml Reaction Block 17 x 60 mm vial with 15/425 thread. Volume of vial: 8ml Solid cap with teflon liner Open hole caps for 8ml vials TFE/Silicone liners for 8ml open hole caps	#988621 (66.00/pk of 200) #98430 (14.50/pk of 100) #95261 (8.00/pk of 72) #98793 (19.00/pk of 100)
Caps and Liners for 20 ml Vials **Vials below** Solid caps with silicone/Teflon liners Open hole caps TFE/Silicone liners for open hole caps	#99052 (22.50/pk of 100) #95331 (20.00/pk of 72) #95333 (45.00/pk of 72)
The 20 ml vials are from Fisher Scientific [(800) 766-7000] but any of the major supply houses will have the same vials. These are scintillation vials. Size: 28 x 61 mm. Cap thread: 22/400	
Vials for 20 ml Reaction Block	Fisher Cat. # 03-337-5 (132.60/pk of 500)

Vials for Reflux Reaction Blocks	
Description	Alltech Associates Catalog #. (800) 255-8324
Vials for 2 ml Reflux Reaction Block 15 x 45 mm vial with 13/425 thread. Volume of vial: 4ml Septum hole caps with teflon cap liner Solid caps with teflon cap liner	#98110 (15.50/pk of 100) #98735 (23.80/pk of 100) #98430 (14.50/pk of 100)
Vials for 4 ml Reflux Reaction Block 17 x 60 mm vial with 15/425 thread. Volume of vial: 8ml Open hole caps for vials TFE/Silicone liners for open hole caps	#988621 (66.00/pk of 200) #95261 (8.00/pk of 72) #98793 (19.00/pk of 100)
Vials for 8 ml Reflux Reaction Block 21 x 70 mm vial with 18/400 thread. Volume of vial: 16ml Solid cap with teflon liner Open hole caps for vials TFE/Silicone liners for open hole caps	#988661 (80.00/pk of 200) #99050 (24.75/pk of 100) #95281 (8.00/pk of 72) #95283 (27.00/pk of 72)
Vials for 20 ml Reflux Reaction Block 28 x 95 mm vial with 24/400 thread. Volume of vial: 40ml Solid cap with teflon liner Open hole caps for vials TFE/Silicone liners for open hole caps	#98912 (22.00/pk of 100) #99054 (27.35/pk of 100) #95321 (16.00/pk of 72) #95323 (47.00/pk of 72)