

## DESK-TOP SINGLE-LAYER GLASS REACTOR



Single-layer glass reactor bath heats materials within the reactor and enhances evaporation efficiency under vacuum conditions (requires connection to a vacuum device).

## APPLICATIONS

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The Torontech Single-layer Glass Reactor is a foundational tool for straightforward thermal processing in a laboratory setting. Its primary application is the direct heating of solutions, often under vacuum, to perform essential tasks such as solvent evaporation, sample concentration, and simple distillation. This makes it an indispensable workhorse for a wide range of basic chemical and material processing tasks where external temperature control via a jacket is not required.

This fundamental thermal processing is essential for efficiency in:

- **Academia & Education:** As a core piece of equipment for teaching labs, perfectly suited for demonstrating fundamental principles of distillation, evaporation, and solvent removal in a clear, observable manner.
- **Herbal Extraction & Food Science:** For the production of botanical extracts and food concentrates by efficiently boiling off solvents (e.g., ethanol) from tinctures or concentrating flavor and aroma compounds.
- **Chemical R&D & Synthesis:** Used for basic, direct-heat chemical reactions and, more commonly, for the post-reaction workup phase to concentrate a product solution by removing the reaction solvent prior to isolation.
- **Quality Control & Sample Preparation:** In analytical laboratories for the preparation of samples, such as concentrating a dilute solution to bring the analyte within the detection range of an instrument or for solvent exchange procedures.

## FEATURES

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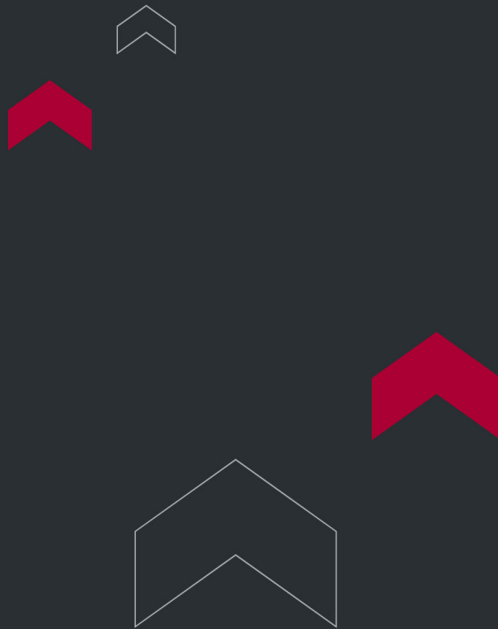
- Materials in contact with substances are crafted from high borosilicate glass and PTFE, ensuring excellent chemical resistance.

- Equipped with a stainless steel bath and a vacuum pressure gauge.
- Features a copper brushless motor with high torque, seamless speed control, and low noise.
- PTFE and fluororubber dual sealing system ensures a reliable vacuum environment.
- Designed with ceramic bearings and mechanical seals for exceptional heat resistance, durability, and effective sealing.

## TECHNICAL SPECIFICATIONS

| Model                             | SR-1L                              | SR-2L                   | SR-3L                     | SR-5L                     |
|-----------------------------------|------------------------------------|-------------------------|---------------------------|---------------------------|
| Glass vessel volume               | 1L                                 | 2L                      | 3L                        | 5L                        |
| Voltage                           | 220V/50Hz (110V is also available) |                         |                           |                           |
| Stirring motor power              | 40W                                |                         | 90W                       |                           |
| Heating power                     | 1.5kW                              |                         |                           |                           |
| Stirring speed                    | 0~800rpm                           |                         |                           |                           |
| Temperature range of glass vessel | -80℃~+250℃                         |                         |                           |                           |
| Bath temperature control range    | RT~180℃                            |                         |                           |                           |
| Temperature measurement accuracy  | +/-1℃                              |                         |                           |                           |
| Vacuum degree                     | 0.098MPa                           |                         |                           |                           |
| Glass vessel diameter             | Φ131mm                             | Φ166mm                  | Φ195mm                    | Φ230mm                    |
| Dropping funnel                   | 250ml                              |                         | 500ml                     |                           |
| Dimensions                        | (400~700)W*330D*900H mm            | (400~700)W*330D*930H mm | (430~1030)W*330D*1100H mm | (430~1030)W*330D*1150H mm |

| Model                                           | SR-1L | SR-2L | SR-3L | SR-5L |
|-------------------------------------------------|-------|-------|-------|-------|
| Weight                                          | 18kg  | 18kg  | 23kg  | 25kg  |
| Note: Explosion-proof models can be customized. |       |       |       |       |



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