Set of glassware for demonstration experiments

LABOTRIX GLASSWARE B1

PRODUCT PASSPORT

Kyiv

2026

Contents

1. Basic product information

1.1. Product name — A set of laboratory glassware and supplies for demonstrations and practical classes in biology.

1.2. Trademark — Labotrix.

1.3. Model — Glassware B1; full trade name — LABOTRIX GLASSWARE B1.

1.4. Manufacturer — Labotrix Group Limited, China.

1.5. Intended use: The set combines classic laboratory glassware and accessories needed for demonstrations and practical classes in biology in secondary schools, in particular at the workplace of a biology teacher. The glassware and accessories are used for observing biological objects, preparing solutions, heating liquids, simple measurements and other practical work during science lessons.

1.6. Design features: The glassware is made of heat-resistant and chemically resistant glass with high transparency. The dimensions are chosen to be optimal for demonstration in front of the class. The glassware is easy to clean and reuse, and the transparency of the glass ensures clear observation of the experiments from any point in the classroom.

1.7. Digital learning support: The product includes access to an online teaching support course hosted in a learning management system (LMS) and designed for 70 academic hours of classes. The course is designed to meet the current curricula of secondary education institutions in Ukraine. The materials are grouped into research modules in the disciplines of physics, biology, chemistry, STEM, and each topic contains a lesson plan, a list of necessary supplies, an experiment scenario, step-by-step instructions for laboratory work with an explanation of the expected result, a video demonstration of work methods, interactive exercises and tasks for independent study, suitable for both individual and group work. All modules are designed for this equipment and tested on it, so the course works in a direct chain of "equipment → methodology → learning results". The course has a built-in assistant based on a language model with a search through the course knowledge base (Retrieval-Augmented Generation): based on the topic of the lesson, it selects relevant experiments, methodically describes the sequence of conducting the research, analyzes typical student errors and gives personal advice on how to get rid of them, changes the level of complexity to prepare for a specific class, and helps to write a research report and organize the conclusions. The assistant's knowledge base is localized and aligned with the Ukrainian curriculum. The license for the course and accompanying software is valid for 12 months from the date of transfer of access; the content, interface, and answers of the assistant are provided exclusively in Ukrainian.

2. Technical specifications

- Brand — Labotrix
- Model — Glassware B1

- The article is LTX-GLASSWARE-B1
- Product type — biology demonstration experiment kit
- Material - heat-resistant and chemically resistant glass
- The optical transparency of the glass is high, making it convenient for observing experiments from any point in the classroom.
- Surface hardness of the glass is increased, resistant to scratches under normal use
- Chemical inertness - resistance to acids, alkalis and salt solutions
- Operating conditions — premises of an educational institution, air temperature from +5 to +40 °C, relative humidity from 40 to 60 % without condensate
- Relative humidity (percent) — up to 80 % at a temperature of +25 °C
- Language of marking and operating documentation — Ukrainian
- Product marking — trademark, model and a space for the inventory number
- Packaging for delivery - lodgement cells in plastic containers with contents fixed
- Ready to use - dishes and accessories are delivered clean and ready to use, no assembly required
- Installation method: on a biology teacher's demonstration table
- Surface care - can be washed with warm water and neutral detergent
- User requirements - work with the set is organized by a biology teacher, students work under supervision
- Digital learning support — online course in a learning management system (LMS)
- Course volume (academic hour) — 70
- Course subjects — physics, biology, chemistry, STEM
- Composition of the materials — research modules, experiment scenarios, step-by-step laboratory work instructions, video demonstrations, interactive exercises and tasks
- Compatibility of the materials with the equipment — full, along the chain "equipment → methodology → learning outcomes"
- Language-model-based assistant — built into the course, with retrieval over a localized knowledge base (Retrieval-Augmented Generation)
- Validity period of the license for the course and the software (month) — 12
- Language of the course, of the interface and of the answers of the assistant — Ukrainian
- Service life (year) — 5
- Warranty period (month) — 12

3. Equipment

- Measuring cylinder with spout and plastic base, glass, 100 ml — 1 pcs
- Low laboratory beaker with scale and drain spout, heat-resistant, glass, 50 ml — 1 pc.
- Low laboratory beaker with scale and pouring spout, heat-resistant, glass, 100 ml — 1 pcs

- Low laboratory beaker with scale and pouring spout, heat-resistant, glass, 250 ml — 1 pcs
- Graduated conical flask, chemically resistant, glass, 50 ml — 1 pc.
- Graduated conical flask, chemically resistant, glass, 100 ml — 1 pc.
- Graduated conical flask, chemically resistant, glass, 250 ml — 1 pc.
- Graduated conical flask, chemically resistant, glass, 500 ml — 1 pc.
- Test tube with flared edges, glass, d=16 mm, h=150 mm — 10 pcs.
- Test tube stickers — 20 pcs.
- Test tube rack, plastic, 10 holes, d holes = 18 mm — 1 pc.
- Reagent jar, plastic, 50 ml — 1 pc.
- Test tube holder, metal — 1 pc.
- Spatula spoon, metal, 150 mm — 1 pcs
- Heat-resistant funnel, glass, d = 60 mm, h = 110 mm — 1 pc.
- Chemically resistant dropper, glass, 30 ml — 1 pc.
- Watch glass, d = 45 mm — 3 pcs.
- Box, glass, d=30 mm — 1 pc.
- Box, glass, d=40 mm — 1 pc.
- Graduated pipette, glass, 10 ml — 1 pc.
- Pasteur pipette, polymer, 3 ml — 1 pcs
- Pasteur pipette, polymer, 5 ml — 1 pcs
- Stirring stick, glass, 200 mm — 5 pcs.
- Universal alcohol, with tripod — 1 pc.
- Dry fuel in tablets, 8 pcs./pack. — 2 packs.
- Brass spray mesh — 1 pc.
- Wooden splints — 10 pcs
- Safety goggles, plastic — 1 pcs
- Protective gloves, textured latex — 3 pair
- Brush for laboratory glassware, d=13 mm — 1 pcs
- Brush for laboratory glassware, d=20 mm — 1 pcs
- Tool set with magnifying glass, 10 items — 1 set.
- Microscope slide, ground edges, 25x75 mm, 50 pcs/pack — 1 pack
- Cover glass, 24x24 mm, 100 pcs/pack — 1 pack
- Petri dish, d=90 mm, h=20 mm — 1 pcs
- Mortar and pestle, porcelain, d=90 mm — 1 pc.
- Filter paper, d=90 mm, 100 pcs/pack — 1 pack
- Hermetic package, polyethylene, 200x280 mm — 5 pcs.
- Gauze, 1 m — 1 pack
- Medical cotton wool, 25 g — 1 pack
- Set of balloons — 1 pack.
- Laboratory tray, metal with wax, 310x210x42 mm — 1 pcs
- Electronic scales, portable — 1 pcs
- Device for demonstrating water absorption by roots — 1 pc.
- Medical tourniquet, 450x25 mm — 1 pcs
- Hand exerciser — 1 pcs

- Hand dynamometer — 1 pcs
- Card for determining the accommodation of the eye — 1 pcs
- Card for detecting the blind spot — 2 pcs
- Distilled water, 250 ml — 1 pcs
- Iodine, 5 %, 20 ml — 1 pcs
- Hydrogen peroxide, 3%, 50 ml — 1 pc.
- Septyl, 96%, 100 ml — 1 pc.
- Hydrochloric acid, 13%, 0.1 N, standard titer — 1 bottle.
- Starch, jar, 100 g — 1 pc.
- Glucose, jar, 50 g — 1 pc.
- Pepsin (microbial renin), 1 g/pack. — 2 packs.
- Set of food coloring (red, blue, yellow), 5 g/pack. — 3 packs.
- Colored cardboard, black, A4 — 2 pcs.
- Rubberized apron — 1 pc.
- Cotton medical gown — 1 pc.
- Methodological guide - 1 set.
- Foam insert — 1 pcs
- Storage boxes (plastic containers for sets) — 1 pc.
- Product Passport and Warranty Card — 1 pcs
- Individual transport packaging — 1 pcs
- Right of access to the online course with a language-model-based assistant (license) — 1 pcs

The kit includes various types of glassware for conducting experiments; the full list of components is given above. The glassware is delivered unpacked and ready to use; no disassembly is required. Spare parts and additional items of the kit must be purchased separately.

4. Safety measures

4.1. General requirements

- Read this passport before first use and keep it with the product.
- The set is used by teachers and authorized persons who have been instructed in occupational safety. Students work with the dishes only under adult supervision.
- Check the unpacked set for cracks, chips and other mechanical damage. Damaged dishes are not allowed to be used.
- Make sure the dishes are clean and in good condition before each use.

4.2. Working with glass

- Handle the dishes with care during unpacking and installation. Glass is a fragile material, vulnerable to mechanical shock.
- Do not expose the dishes to sudden changes in temperature: this may cause the glass to crack.
- Place the dishes on a flat, stable surface to prevent them from falling.
- Prevent the dishes from tipping over during operation and demonstration.

4.3. Working with liquids and heat

- When working with flammable liquids, keep them away from open flames and hot surfaces.
- When heating liquids in a pan, do so gradually to avoid splashing and steam.
- Use special pads and holders for hot dishes; do not handle dishes with bare hands.
- Let the dishes cool before washing with cold water.

4.4. It is strictly forbidden

- Leaving hot dishes unattended near students.
- Use dishes that have cracks or chips; dispose of them as broken glass.
- Exceeding permissible temperatures during heating; choose slow heating.
- Immerse the dishes in cold water immediately after heating.
- Leave dishes unattended in a place accessible to students.

5. Preparation for work

5.1. Unpack the dishes on a flat, smooth surface with a soft surface to avoid damaging the glass.

5.2. Inspect each item for damage, cracks, and chips. Remove damaged items from use.

5.3. Wash all dishes with warm water and neutral detergent to remove factory dust and packaging residue.

5.4. Allow the dishes to air dry or wipe with a soft cloth.

5.5. Place the dishes on the display table so that they are clearly visible from all areas of the classroom and are securely secured against falling.

5.6. Check that you have the necessary laboratory equipment for heating (universal alcohol, dry fuel) and all items listed in the packing list.

6. Procedure

6.1. Placing dishes on the display table

- Arrange the dishes so that the lighting falls optimally and does not create glare that would interfere with observation.
- Secure the dishes to the table to prevent them from falling while you work.
- Make sure there is a safe place nearby to place hot dishes.

6.2. Preparation for the study

- A few minutes before the start of the experiment, set up the dish, fill it with the test material or liquid, strictly following the instructions for the specific experiment.
- Make sure all students can see the dishes from their seats.

6.3. Conducting research

- Carry out the experiment slowly and carefully to allow students to observe all changes.
- Allow students to take notes and sketch observations.
- When dissolving chemicals, follow the proportions specified in the method manuals.

6.4. Heating the liquid

- Place the cookware on a stable stand over the heat source.
- Heat gradually, recording temperature changes if necessary for the experiment.
- Be careful not to let the liquid boil abruptly or splash.

6.5. Completion of work

- Allow hot dishes to cool to a safe temperature before washing.
- Wash the dishes with warm water and detergent.
- Wipe the dishes dry with a soft cloth and store them according to section 8 of this passport.

6.6. Working with an online course

- Obtain an account at the educational institution and activate the right of access to the course; the validity period of the license is counted from the date on which access is transferred.
- Select the topic of the lesson in the course list: every topic is accompanied by a plan, a list of equipment, an experiment scenario, a step-by-step instruction, a video demonstration and interactive tasks.
- Formulate a query to the assistant on the topic of the lesson — it will suggest appropriate experiments, set out the sequence of actions, examine typical errors and advise how to correct them.
- Set the level of difficulty of the tasks to match the preparation of the class; on the basis of the results of the work the assistant will help to draw up the report and to organize the conclusions.

7. Care, maintenance and possible malfunctions

7.1. Cleaning

- Wash immediately after use, until the dirt has dried.
- Use hot water and neutral detergent; avoid abrasive powders.
- For stubborn dirt, soak the dishes in water with detergent for 15-20 minutes.
- Wipe the dishes with a soft cloth to avoid streaks and stains.
- Dry the dishes especially thoroughly before storing.

7.2. Periodic control

- Check all dishes for microcracks every month, especially on the interior surfaces.
- Check the transparency of the glass and the absence of cloudiness.

- Record all detected defects; remove dishes with cracks, chips, or persistent cloudiness from use and dispose of as broken glass - glassware cannot be repaired.

7.3. Possible malfunctions and ways to eliminate them

Symptom	Possible cause	User actions
There is sludge at the bottom of the dishes.	Mineral deposit buildup from hard water	Soak the dishes in a vinegar solution (1:1 with water) for 30 minutes, rinse and wipe dry.
Clouding of the glass surface	Fine scratches from abrasive cleaning or chemical reaction with substances	Polishing is not recommended; continue use if integrity is intact
Crack or chip on the edge	Mechanical injury from a fall or impact	Discontinue use; remove the glassware as hazardous and dispose of as glassware - glassware cannot be repaired.
A grainy coating has appeared on the inside of the cookware.	Residues of mineral salts from previous experiments	Soak and rinse thoroughly with distilled water
The cookware cracked after heating and cooling.	Sudden change in temperature	Stop using; allow the cookware to cool naturally.

8. Storage and transportation conditions

- Store the dishes in a dry, closed room, maintaining the temperature not lower than +5 °C and not higher than +40 °C, with a relative humidity of up to 80% at +25 °C without condensation.
- Place dishes in special cabinets or shelves with soft intermediate dividers to prevent glass pieces from coming into contact with each other.
- Store large and small dishes separately so that large items do not damage small ones.
- Protect dishes from dust and aggressive vapors - close cabinets with doors or cover with covers.
- When transporting, pack the dishes in the original container using sufficiently soft packing material.

- The storage period before commissioning is not limited if the specified conditions are met; conduct an inventory of dishes at least once every six months.

9. Warranty obligations

9.1. The warranty period of the product is 12 months from the date of sale specified in the warranty card.

9.2. The manufacturer guarantees that the product complies with the declared technical characteristics, provided that the rules for transportation, storage and operation set out in this passport are followed.

9.3. During the warranty period, product defects that have arisen due to the manufacturer's fault will be eliminated free of charge. The method of elimination (repair, component replacement or product replacement) is determined by the service center.

9.4. Warranty service is provided upon receipt of a correctly and completely filled out warranty card and a document confirming the fact and date of purchase.

9.5. The warranty does not apply to cases where the malfunction is caused by:

- mechanical damage, in particular cracks, chips and deformation of the housing and of the components of the product;
- violation of the operating, storage or transportation rules set out in this passport;
- ingress of liquid or foreign objects into the product, and also the action of insects and animals;
- independent disassembly, repair or modification of the product, in particular repair at unauthorized workshops;
- use of the product other than for its intended purpose;
- force majeure circumstances (fire, flood, earthquake, etc.).

9.6. The warranty does not apply to natural wear and tear of the coating and appearance of the product, as well as to consumables.

10. Product disposal

- The product must not be disposed of together with unsorted municipal waste. This is indicated by the marking in the form of a crossed-out container on the product or its packaging.
- After the end of the service life, hand the product over to a collection point for the corresponding waste or to an organization holding the appropriate permit.
- Hand over the packaging elements (cardboard, polymer materials) to the corresponding streams of recyclable materials.

Contacts

LABOTRIX GROUP LIMITED
Room 910, Isteelasia 1 No. 18 Fu'an Blvd, Pinghu Subdistrict,
Longgang District, Shenzhen City,
Guangdong Province, China 518111
Phone: +86 13925261264
E-mail: salesmanager@labotrix.com
Website: https://labotrix.com/

Address in Ukrainian:
LABOTRIX GROUP LIMITED
Room 910, Istilazia 1, Fuan Boulevard No. 18,
Pinghu Subdistrict, Longgang District,
Shenzhen, Guangdong Province, China 518111
Telephone: +86 13925261264
E-mail: salesmanager@labotrix.com
Website: https://labotrix.com/

Conditions of use and storage of the product

The product is intended for educational work in general secondary education institutions and is used only under the control and supervision of a teaching staff member; the recommended age of students — from 10 years, that is, students of grade 5 and of higher grades. Keep the product in a dry, clean and ventilated room at a temperature from +5 to +40 °C and relative air humidity up to 80 % without condensation, separately from heat sources and out of direct sunlight, moisture and dust. Use the product exclusively for its intended purpose and do not allow drops, impacts or other mechanical damage. If you notice damage, a crack or any malfunction, stop working with the product immediately and inform the teacher or the responsible person of the educational institution; repairing the product on your own is prohibited.

WARRANTY CARD

Product name:	Set of glassware for demonstration experiments
Product model:	LABOTRIX GLASSWARE B1
Serial number:	
Date of sale:	
Warranty period:	12 months from the date of sale
Trading organization:	
Signature of the seller:	

The goods have been received in working order, without visible damage, complete, and have been checked in my presence. I have no claims regarding the quality of the goods; I have read and agree to the operating and warranty service conditions.

Full name of the buyer

Buyer's phone number Buyer's signature

Dear Customer!

Thank you for choosing Labotrix products. After-sales service of this product is provided in accordance with the regulations of the company and the legislation of the country of sale. So that we can serve you quickly and without unnecessary formalities, check that this warranty card is filled in correctly at the moment of purchase and keep it together with the payment document throughout the entire warranty period. When applying for repair, hand the product over to the seller or to the service center together with the filled-in card.

Procedure for applying

1. The right to free warranty service for the product is valid for 12 months from the date of sale specified in the warranty card. Within this period, components that have failed due to a manufacturing defect are repaired or replaced without payment from the buyer.
2. Before contacting, make sure that the malfunction is not caused by the reasons listed in section 9 of this passport, and if possible, use the table of possible malfunctions in section 7.3.
3. After the 12-month warranty period, repairs are carried out for a fee; the cost of work and spare parts is determined depending on the nature of the malfunction.

Grounds for refusal of warranty service

The company reserves the right to refuse free service or to perform the work on a paid basis if at least one of the following circumstances is established:

- absence of the warranty card, its incomplete or corrected completion, and also the absence of a document confirming the purchase;
- non-conformity of the serial number of the product with the number specified in the card, or damage to the factory marking;
- traces of independent disassembly, repair or modification of the product;
- damage caused by violation of the operating rules, connection to an unsuitable power source or external mechanical impact;
- damage as a result of force majeure circumstances.

Service Records

Date of entry	Description of the malfunction	Work performed	Position, signature, full name of the responsible person