

# MagSorb-16 Magnetic rack for manual nucleic acid extraction



# 1 Safety Precautions



Caution!

Make sure you have fully read and understood the present Manual before using the equipment. Please pay special attention to sections marked by this symbol.



Caution!

**Magnetism!** Effects of a strong magnetic field on the biological systems have to be taken into account. Magnetic fields can affect heart pacemaker, data carriers, etc.

- Use only as specified in the Operating Manual provided.
- Save the unit from shocks or falling.
- Store and transport the unit at ambient temperatures between -20°C and +60°C and maximum relative humidity of 80%.
- Before using any cleaning or decontamination methods except those recommended by the manufacturer, check with the manufacturer that the proposed method will not damage the equipment.
- Do not make modifications to the design of the unit.
- It is the user's responsibility to carry out appropriate decontamination if hazardous material is spilt on the equipment.

# 2 General Information

Biosan presents the complete line of necessary instrumentation to utilize magnetic bead extraction kits and protocols from various manufacturers and meet the most demanding user requirements.

The one of the foundations of this line is MagSorb-16 which is a magnetic rack that easily accommodates up to 16 single use tubes (1.5 - 2 ml). The rack consists of following parts: tube mounting racks and magnetic stand.

Different manufacturers offer wide range of magnetic NA extraction kits, but all of them are based on magnetic particles and utilize the same principles of extraction. Every step of extraction on magnetic particles is crucial, so it is important to choose the right equipment for effective NA purification.

# 3 Setup and operation

- 3.1 Unpacking. Remove packing materials carefully and retain them for future shipment or storage of the unit. Examine the unit carefully for any damage incurred during transit. The warranty does not cover in-transit damage. Warranty covers only the units transported in the original package.
- 3.2 **Complete set**. Package contents:
- 3.3 Setup. Place the magnetic stand on even horizontal surface. Put two tube holders on the magnetic stand.
- 3.4 **Operation**. Use the rack according to your NA extraction protocol.



The rack contains several rare-earth magnets. Magnetic fields can affect heart pacemaker, data carriers, etc. Contact with other magnets or ferromagnetic materials may damage the unit or the user.

# 4 Specifications

- 4.1 The unit is designed for operation in cold rooms, incubators (except CO<sub>2</sub> incubators) and closed laboratory rooms at ambient temperature from +4°C to +40°C.
- 4.2 Biosan is committed to a continuous programme of improvement and re-serves the right to alter design and specifications of the equipment without additional notice.
- 4.3 **Specifications**:
- 4.3.1 Number of tubes.....up to 16

- 4.3.5 Empty weight, accurate up to ±10%.......315 g

# 5 Maintenance and cleaning

- 5.1 **Maintenance**. If the unit requires maintenance, contact Biosan or your local Biosan representative.
- 5.2 Cleaning and disinfection. Use mild soap and water with a soft cloth or sponge for cleaning the unit. Rinse remaining washing solution with distilled water. Wipe dry the excess water with clean, soft cloth or sponge.
- 5.2.1 **Decontamination**. We recommend using a special DNA/RNA removing solution (e.g., Biosan PDS-250, DNA-Exitus Plus™, RNase-Exitus Plus™).
- 5.2.2 Tube holders. The tube holders are made of acrylic glass (polymethyl methacrylate, Plexiglas®) and are prone to scuffing and scratches if improperly cleaned. Care during cleaning is recommended to reduce the wear on the acrylic glass surface.



### Caution!

Never use organic solvent-based compounds, pure alcohol, alcoholcontaining cleaners (more than 20%) or ammonia-containing cleaners for acrylic glass. Do not use abrasives. The table below shows the interaction of acrylic glass with ethyl alcohol and other solutions.

Solvent	Effect on acrylic glass	
Biosan PDS-250	No reaction	
DNA-Exitus Plus™	No reaction	
RNase-Exitus Plus™	No reaction	
H <sub>2</sub> O <sub>2</sub> 6%	No reaction	
Ethyl alcohol ≤20%	No reaction	
Ethyl alcohol >20%	Increasing reaction. Do not use!	



Note.

Crazing is a normal process for acrylic glass exposed to direct UV light. Crazing will occur over time. Crazing may occur within the warranty period and is regarded as normal wear and not covered by the warranty.

# 6 Warranty

- 6.1 The Manufacturer guarantees the compliance of the unit with the requirements of Specifications, provided the Customer follows the operation, storage and transportation instructions.
- 6.2 The warranted service life of unit from date of delivery to the Customer is 24 months.
- 6.3 Warranty covers only the units transported in the original package.
- 6.4 If any manufacturing defects are discovered by the Customer, an unsatisfactory equipment claim shall be compiled, certified and sent to the local distributor address. Please visit the **Technical support** section on our website at the link below to obtain the claim form.

### Technical support



### biosan.lv/en/support

6.5 The following information will be required in the event that warranty or post-warranty service comes necessary. Complete the table below and retain for your records.

Model	Serial number	Date of sale
MagSorb-16, Magnetic rack for manual nucleic		
acid extraction		

### **Biosan SIA**

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https://biosan.lv





# Certification

Awarded to

# **BIOSAN SIA**

RĀTSUPĪTES IELA 7 K-2, RĪGA, LV-1067, LATVIA

Bureau Veritas Certification certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standard detailed below

**STANDARD** 

ISO 9001:2015

SCOPE OF CERTIFICATION

DEVELOPMENT, PRODUCTION, SALES AND SERVICE OF LABORATORY EQUIPMENT.

Original cycle start date:

25-05-2004

Expiry date of previous cycle:

25-05-2022

Certification/Recertification audit date:

17-05-2022

Certification/Recertification cycle start date:

26-05-2022

Subject to the continued satisfactory operation of the organisation's Management System, this certificate expires on:

25-05-2025

Certificate Number:

LV007741

Version: 1

Revision date:

19-05-2022



Certification body address: Bureau Veritas Latvia SIA, Duntes street 17a, Riga, LV-1005, Latvia

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organisation.









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# Biosan SIA

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Bureau Veritas Certification certify that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standard detailed below

Standard

# ISO 13485:2016

SCOPE OF CERTIFICATION

DEVELOPMENT, DESIGN, PRODUCTION, SERVICE AND DISTRIBUTION OF MEDICAL DEVICES: DEVICE FOR MEASURING OPTICAL DENSITY (OD), AUTOMATIC MICROPLATE WASHER. MICROPLATE PHOTOMETER. SALES, STORAGE AND DISTRIBUTION OF ACTIVE AND NON ACTIVE NONIMPLANTABLE MEDICAL DEVICES.

Original Cycle Start Date:

26-05-2022

Expiry date of previous cycle:

NA

Certification / Recertification Audit date:

18-05-2022

Certification/Recertification Cycle Start Date:

26-05-2022

Subject to the continued satisfactory operation of the organization's

Management System, this certificate expires on:

25-05-2025

Certificate No.: LV007756

Version: 2

Issue date: 03-07-2023





# MagSorb-16, Magnetic Rack for Manual Nucleic Acid Extraction

# DESCRIPTION

Biosan presents the complete line of necessary instrumentation to utilize magnetic bead extraction kits and protocols from various manufacturers and meet the most demanding user requirements.

The one of the foundations of this line is MagSorb-16 which is a magnetic rack that easily accommodates up to 16 single use tubes (1.5–2 ml). The rack consists of following parts: tube mounting racks and magnetic stand.

Magnetic beads based NA extraction methods offer quick and efficient separation of genetic material from cellular leftovers. Wide variety of commercially available extraction kits manufactured by companies like ThermoFisher Scientific, Promega, Qiagen etc. are available in the market.

Our MagSorb-16 magnetic rack can be used together with any manufacturers magnetic beads based NA extraction reagents, that allow working in 1.5-2.0 ml tube format.



## SPECIFICATIONS

Number of places in stand	16
Tube's volume	1.5 - 2 ml
Tube's manufacturer	Eppendorf or equivalent
Overall dimensions (W×D×H)	220x70x45 mm
Weight	0.3 kg



**BS-010601** MagSorb-16, mounting racks and magnetic stand