

2024-05-16

Signature:

## Operating Instructions

According to the  
Betriebssicherheitsverordnung

UNIVERSITÄT  
DUISBURG  
ESSEN

*Offen im Denken*

Faculty of Chemistry

Institute: AAC

Work place: AAC Labs

### EQUIPMENT

#### Agilent ICP-OES

### DANGERS FOR HUMANS AND ENVIRONMENT



- **High-frequency alternating electric fields**
- **Hot surfaces**
- **Asphyxiating gases (argon)**
- **Acids, solvents**
- **UV radiation of the plasma**

### PROTECTIVE MEASURES AND RULES OF CONDUCT



- Be sure to observe the operating instructions.
- Keep the front and rear covers closed.
- Connect the instrument to a grounded electrical outlet.
- The exhaust gases from the plasma and vacuum system must be discharged through the laboratory ventilation system.
- The ventilation slots of the instrument must be kept clear during operation.
- Do not move the unit unless switched off by service technicians.
- Handle fragile glass components with care.
- If you wear a pacemaker or similar implanted device, consult your physician before using this device.
- Never open the front cover while the unit is in operation.
- Never look directly into the plasma as eye damage or blindness may result.
- Wait until the unit has cooled down before performing any maintenance.
- Check the spray chamber waste container regularly and clean if necessary, empty the container when changing from aqueous to organic solvents. Never use glass containers.
- After switching off the plasma, let the cooling water run for another 10 minutes.

## RESPONSE TO MALFUNCTIONS



Shut down device immediately, faults must be reported to:

- Constanze Dietrich Tel.: 1834559
- Dr. Sven Meckelmann Tel.: 1833295
- Prof. Dr. Oliver Schmitz Tel.: 1833950

## BEHAVIOR IN CASE OF ACCIDENT / FIRST AID



- Keep calm.
- Call first responders.
- Emergency call: 0112
- Report accident.

## INSTANDHALTUNG / ENTSORGUNG

- Maintenance only by authorized, competent persons.
- Switch off the device and disconnect it from the mains.
- Regular inspection of wearing parts.