

2024-05-16

Signature:

Operating Instructions

According to the
Betriebsicherheitsverordnung

UNIVERSITÄT
DUISBURG
ESSEN

Offen im Denken

Faculty of Chemistry

Institute: AAC

Work place: AAC Labs

EQUIPMENT

Bruker Amazon Speed DIP, Ion Trap and further developments

DANGERS FOR HUMANS AND ENVIRONMENT



- There is a risk of electric shock if voltage is applied during assembly or disassembly of the DIP.
- There is a risk of electric shock if the protective conductor is missing or interrupted.
- Danger of crushing if not installed properly.
- There is a risk of crushing, jamming and burns while the sample is being injected.
- Risk of burns from the push rod (max. 400°C).
- The borosilicate capillaries may shatter during injection.
- shatter during the injection.
- High weight (110 kg) of the Ion Trap

PROTECTIVE MEASURES AND RULES OF CONDUCT



- **Please observe the operating instructions.**
- During installation as well as uninstallation, no voltage may be applied to the unit, otherwise there is a risk of electric shock.
- Caution when installing the DIP on the ion source body.
- The unit must be earthed before applying any voltage.
- The push rod can reach a temperature of 400°C, so allow to cool before uninstalling.
- Do not touch the push rod during operation.
- When dismantling the DIP, work in pairs if possible, hold the DIP firmly.
- Carry out installation and deinstallation without applying pressure.
- Use only original wires and cables for the connections.
- Do not open the spray chamber during operation.
- The sample jars should only be touched with the corresponding holder or with tweezers.
- Adjust the gas pressure according to the specifications.
- Due to the high weight of 110 kg, there are special requirements on the carrier table, move with 4 persons if possible.
- The needle is very sharp and must not be touched under any circumstances.

- Do not touch heating elements near the ionisation chamber directly after the measurement, wait until they cool down.
- Check the ventilation filter below the front cover every three months.

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.