



UTTD basic IVD Solution

/// Data Sheet

Microbiological and molecular biological analysis of patient samples:

The crushing and disruption of tissue, cartilage and bone samples is an essential step before the actual microbiological and molecular biological analysis of patient samples.

The challenges in this preoperative step are to crush the sample homogeneously and not to contaminate the sample on the way to analysis.

With the ULTRA-TURRAX® Tube Drive, IKA offers a powerful, universal shredding drive that is operated in combination



designed for scientists

with patented disposable plastic containers.

The sample containers specially developed for in-vitro diagnostics are available in single or double sterile packaging and are already filled with 5 ml of 0.90% saline solution.

The crushing of the sample is carried out with 10 stainless steel balls contained in the tube, which are set in motion with the help of the drive via a tumbler with up to 3000 revolutions. The accelerated balls break up the sample or reliably detach tissue from the bone. Any germs that may be present pass into the liquid phase (NaCl solution).

The sample material can be introduced into the sterile sample container directly in the or after opening the lid. The subsequent transport to the laboratory takes place in a hermetically sealed container.

In the microbiological laboratory, the tube is placed directly on the drive and the sample is crushed. This eliminates the need for additional mechanical processing. A risk of cross-contamination can thus be ruled out.

The samples can then be taken via the pierceable membrane in the sample lid.

The lockable disposable sample tubes are transport containers, comminution containers and storage all in one. They significantly reduce the cleaning effort and systematically rule out cross-contamination. Users benefit from reduced handling costs and a reduced number of incorrect diagnoses.

The disposable tube BMT-20-S-IVD is an in-vitro diagnostic product according to Directive 98/79/EG and manufactured according to ISO 13485:2016.

Approved for all EU countries.

Important instructions: Observe our operating instructions

› Processing of the sample is only possible with the device IKA ULTRA-TURRAX® Tube Drive or IKA ULTRA-TURRAX® Tube Drive P control

› The milling time must be adapted to the shape and size of the sample.

› Max. RPM / Max. Timer:

IKA ULTRA-TURRAX® Tube Drive: scale 4 / 1 min

IKA ULTRA-TURRAX® Tube Drive P control: 3000 rpm / 1 min

- Volume [mL]: 20
- Working range [mL]: 5 - 15
- Functional unit: 10 steel balls, 5mm
- Membrane cover: yes
- Sterile: yes
- IVD marking: yes
- Packaging unit [pcs]: 50
- Applications: dry grinding, cell disruption, wet grinding
- Miscellaneous: incl. 5 mL NaCl solution



designed for scientists

Technical Data

| | |
|--|----------------|
| Motor rating input [W] | 20 |
| Motor rating output [W] | 17 |
| Speed display | scale |
| Speed range [rpm] | 300 - 6000 |
| Viscosity max. [mPas] | 5000 |
| Speed deviation [%] | 10 |
| Speed adjustment | stepless |
| Noise without element [dB(A)] | 50 |
| Process type | batch |
| Dimensions (W x H x D) [mm] | 100 x 40 x 160 |
| Weight [kg] | 0.75 |
| Permissible ambient temperature [°C] | 5 - 40 |
| Permissible relative humidity [%] | 80 |
| Protection class according to DIN EN 60529 | IP 20 |
| Voltage [V] | 100 - 240 |
| Frequency [Hz] | 50/60 |
| Power input [W] | 20 |
| DC Voltage [V=] | 24 |
| Current consumption [mA] | 800 |