

Disposable Dispersing Elements

/// Cross-contamination free homogenizing and processing

The KS series of disposable dispersing elements are a unique addition to the long established IKA ULTRA-TURRAX® dispersing product line. For applications where the risk of cross-contamination is paramount the KS dispersing elements offer a single-use and disposable option for the IKA dispersers. Available in packs of 12 or 24 pieces, constructed of FDA approved plastic materials and with the ability to be easily sterilized, the KS series of dispersing elements offer multiple solutions to some of the laboratory homogenizing applications' toughest challenges. These plastic dispersing elements are also recommended in applications where samples are incompatible with stainless steel.



T 10 basic ULTRA-TURRAX®



T 18 digital ULTRA-TURRAX®



S 10 D - 7 G - KS - 65
Ident No.: 0020002076

S 10 D - 7 G - KS - 110
Ident No.: 0020002075

S 18 D - 10 G - KS
Ident No.: 0003452400

Suitable drive	T 10 basic	T 10 basic	T 18 digital / T 18 brushless digital
Working range	1 – 40 ml	1 – 20 ml	10 – 100 ml
Diameter	7 mm	7 mm	10 mm
Immersion depth	20 – 65 mm	20 – 90 mm	15 – 85 mm
Material	PC, PSU	PC, PSU	PC, PEEK Plastic materials used approved by FDA
Max. temperature	100 °C	100 °C	100 °C
Autoclavable	Yes	Yes	Yes
Scope of delivery	24 pcs	24 pcs	12 pcs



Perfect complement:
[S 18/25-ET50 disposable tube](#)
Ident No.: 0003452500

The 50 ml disposable tube made of PP was designed to be attached onto the plastic dispersing elements of the disperser series T 18 and T 25 digital ULTRA-TURRAX®. It allows dispersing in a closed system (splash guard).



T 18 brushless digital ULTRA-TURRAX®



T 25 / T 25 easy clean ULTRA-TURRAX®



S 18 D - 14 G - KS
Ident No.: 0003452300

S 25 D - 10 G - KS
Ident No.: 0003452200

S 25 D - 14 G - KS
Ident No.: 0003452100

Suitable drive	T 18 digital / T 18 brushless digital	T 25 / T 25 easy clean	T 25 / T 25 easy clean
Working range	10 – 500 ml	10 – 100 ml	10 – 500 ml
Diameter	14 mm	10 mm	14 mm
Immersion depth	15 – 85 mm	15 – 85 mm	15 – 85 mm
Material	PC, PEEK Plastic materials used approved by FDA	PC, PEEK Plastic materials used approved by FDA	PC, PEEK Plastic materials used approved by FDA
Max. temperature	100 °C	100 °C	100 °C
Autoclavable	Yes	Yes	Yes
Scope of delivery	12 pcs	12 pcs	12 pcs

Application

RNA/DNA extraction and separation

Sample disruption is a necessary early step in the isolation of RNA, DNA, and proteins. Rotor stator homogenizers are an ideal physical method used to disrupt the sample since thorough homogenization of cells or tissues is an essential step in DNA/RNA isolation that prevents both loss and degradation of genetic material.

TISSUE HOMOGENIZA- TION UNDER STERILE CONDITIONS

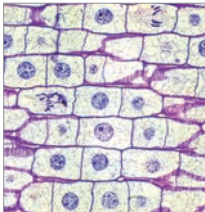
Muscle tissue
Heart tissue
Lung tissue
Animal tissue
Cell lysis
Tissue biopsies

BIOTECHNOLOGY

Bacterial suspensions
Fungal spores
Hemicellulase blending

PHARMACEUTICAL MILLING AND MICRONIZATION

Enzymatic emulsions
Vaccine emulsions
Powder dispersion



Our customers' application highlights

INDUSTRY	DEVICE AND TOOL	PROCESS
Biology and medical R&D labs in universities and hospital	Disperser: T 10 Dispersing elements: S 10 D	› Cell homogenization › Homogenizing animal and plant tissues
Fast testing in mobile labs of Government Health organizations (FDA and CDC)	Disperser: T 18 and T 25 Dispersing elements: S 18 D and S 25 D	› Cell homogenization of clinical specimens
Biotechnology and seed culture	Disperser: T 18 Dispersing elements: S 18 D	› Dispersing fungal pellets for seed culture
Proteomics	Disperser: T 18 Dispersing elements: S 18 D	› Breakdown of amniotic sac for hormone extraction and purification

FAQ

1. How many times can I use a single KS disposable dispersing element?

The tools are ideally appropriate for a single-use. However they can be reused several times, depending on the application. However, the lifetime of these dispersing elements is limited.

2. Are the KS disposable dispersing elements sterile?

The dispersion tools are not sterile, but they can be sterilized before use. Different sterilization techniques allowed are found in the manual.

3. How long can I operate the IKA disperser with the KS disposable dispersing element?

This depends on the RPM used. If using the maximum 25 000 rpm – do not operate for more than 60 seconds at a time. Longer application times bring no further improvements except to generate more heat.

4. Are the materials of construction approved by the FDA?

The plastic materials used are approved by FDA (Food and Drug Administration Compliance certificates can be provided upon request).

5. What is the difference between the dispersing elements with different diameters?

Dispersing elements with larger diameters are able to process larger sample volumes.

6. Can the dispersing elements be used directly inside of a 1.5 / 2.0 ml microtube?

Yes, all the dispersing elements with a diameter of 10 mm and below can be used to process samples directly inside of these microtubes.

Further accessories
can be found at
www.ika.com