



# CounterClean E

## Enzymatic Catalytic Deproteinising Cleaning Solution Special for Hematological Cell Counters.

### Principle

COUNTERCLEAN E is a special enzymatic cleaning solution for haematological counters, to solve native protein precipitations and other organic products by enzymatic/catalytic breakdown. Fixation and denaturing of proteins (like with "usual" cleaning agents as for example hypochlorite solutions) thereby becomes impossible.

### Characteristics

- COUNTERCLEAN E has an enzymatic and catalytic effect on pH = 1.5 ... 2.0 and it is rinseable completely with water or isotonic diluent. Best cleaning-effect at maximum of activity by 35 ... 37 °C.
- COUNTERCLEAN E removes sure all natural protein depositions.
- COUNTERCLEAN E is suitable to all equipments made off glass, ceramic or plastics.
- COUNTERCLEAN E has a shelf life of a long time in result of separate packaging of the COUNTERCLEAN E solution and the special COUNTERCLEAN E -enzyme/catalyst compound.

### Reagents

Store the unused reagents until expiration date at a storage temperature between +4 ... +8 °C (particular COUNTERCLEAN E -enzyme/catalyst compound).

### Risks and Safety

Please observe the necessary precautions for use of laboratory reagents. Applications should be performed by expert personnel only. Follow the national and laboratory internal guidelines for work safety. Wear suitable protective clothing, safety eyewear and disposable gloves while handling.



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For additional safety information please refer to the information on the label and the corresponding Safety Data Sheet (SDS).

Download by QR code or link: [www.sds-id.com/100052-2](http://www.sds-id.com/100052-2)

### Main Components/Contents

004710-...	[Cont.]	Buffer Solution pH ca. 2.0, Detergenz <0,002%, Enzyme-Catalyst-Compound
004010-6001	SET	5x 100 ml CounterClean E®
004011-0100	1.	5x 100 ml CounterClean E • Buffer Solution
004012-0100/5	2.	5x CounterClean E • Enzym-Catalyst-Compound for 100 ml
004010-6002	SET	1x 500 ml CounterClean E®
004011-0500	1.	1x 500 ml CounterClean E • Buffer Solution
004012-0500	2.	1x CounterClean E • Enzym-Catalyst-Compound for 500 ml

### Pre-preparation

For use add the quantity of one tube of the enzyme/catalyst (4712) to one bottle of COUNTERCLEAN E (4711) solution. To dissolve completely, shake the bottle carefully several times within 10 minutes.

The usable cleaning solution has a shelf life about 4 weeks by storage at +4 ... +8 °C. Older cleaning solution has no sufficient enzymatic-catalytic activity! This is caused by the very high cleaning activity of COUNTERCLEAN E and therefore the obligatorily reduction of the enzyme-catalyst-components.

To guarantee the tenability of the ready to use cleaning solution, store the bottle of COUNTERCLEAN E solution always at refrigerator temperature.

Take only the quantity you need in this moment. Warm up only this quantity to 20 ... 37 °C to activate the enzymatic-catalytic effect.

If the finished cleaning solution is stored erroneously longer than 1 hr at room temperature, the enzyme-catalyst is exhausted and the solution must be disposed.

### Application

Rinse the measuring capillary for a adequate time (ca. 10 ... 60 minutes - if necessary for several hours) with COUNTERCLEAN E. After that rinse sufficiently with IsoDil (isotonic diluent). See also instruction manual of the counter manufacturer.

### Application note

The tube enzyme-catalyst contains the correct quantity of enzyme-catalyst mixture independent of the filling volume.

COUNTERCLEAN E reacts at acidic pH sector. Therefore don't contact or use simultaneous with alkaline sodium hypochlorite solutions. Hypochlorite solutions and acidic solutions may vapor very toxic chlorine gases!

### Comparison of cleaning effects

For cleaning of Hematologic Cell Counters sometimes sodium hypochlorite solutions will be used.

This hypochlorite solutions have only a very small cleaning effect to proteins: The proteins will be denaturated and a monomolecular layer remains; on this easily new proteins deposit.

Denaturation of proteins is comparable with the 20 minute boiling of an egg - also the protein of the egg denaturates to a stiff mass. It is well-known that cleaning of denaturated (stiff) proteins is much more difficult as cleaning of native (liquid) proteins.

COUNTER CLEAN E doesn't denature proteins! There is no stick together with the surface of the parts. COUNTER CLEAN E cleaves all proteins down to their amino acid components, which will be bound together with special detergents and can be rinsed of.

Consequence of this procedure is outstanding cleaning effect, every time unattainable with other cleaning solutions.

## Notes

This product information exclusively relates to the product described in this leaflet. In particular, this product information cannot be applied to similar reagents from other manufacturers.

Periodically check for updates of this product information on our website.

### **Instruction for use**

For professional use only.

To avoid errors, the use of qualified personnel is carried out. National guidelines for work safety and quality assurance must be followed.

The used equipment must comply with the state of technology and the laboratory requirements.

All samples and used tubes/vials must be marked clearly identifiable to exclude any confusion.

### **Support / Information service**

For methodological and technical support, please contact us by E-Mail at [support@bioanalytic.de](mailto:support@bioanalytic.de).

Periodically check for updates of this product information on our website.

### **Feedback**

Information from users can be reported to [support@bioanalytic.de](mailto:support@bioanalytic.de).

Suggestions for further developments will be considered.

### **Waste Management**

**Please observe your national laws and regulations.**

Used and expired solutions must be disposed of in accordance with your local regulations.

Inside the EU, national regulations apply that are based on the current, amended version of Council Directive 67/548/EEG on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances.

Decontaminated packaging can be disposed of as household waste or recycled, unless otherwise specified.

### **Unused Remains**

These are usually hazardous wastes that must be recycled or disposed of. After consultation we take back such residual materials in the original container.

## Literature & Footnotes

Legends for the graphic symbols and tags used follow relevant norms or are available on our internet pages.