



# LipidEx

## Clarifier for sera and plasmas

### for subsequent analysis by optical measurement methods

#### Principle

LipidEx is used to clarify lipemic serum and plasma in preparation for examination by optical methods (photometry).

Dilution of the samples with physiological saline solution is not always sufficient, since the dilution also reduces the concentration of the analyte and this is often outside the measurable range - wrong results are the result.

In this case, the blank values of heavily turbid samples can be greatly reduced with LipidEx without affecting the measurement of hydrophilic components (1, 2).

#### Reagent

LipidEx contains organic solvents and is very volatile.

LipidEx should always be kept in the refrigerator (less evaporation). The bottle must always be kept tightly closed.

#### Risks and Safety

Please observe the necessary precautions for use of laboratory reagents and body fluids. Applications should be performed by expert personnel only.

At least one of the contained solvents is subject to the regulation prohibiting halogenated hydrocarbons that deplete the ozone layer (VVO v. 6.5.91 and 2. BImSchV) and may only be used for research, development or analysis purposes!

Please handle this reagent very carefully and use it exclusively in accordance with the regulations. In particular, always keep the bottle very tightly closed and stored cool (preferably in the refrigerator/freezer) (low boiling point).

If decanting should become necessary, use glass bottles with a solvent-resistant/diffusion-proof cap if possible.



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

The safety settings were made according to legal guidelines. If there are differences in the labeling or the safety information between the label and SDS, the details of the SDS are valid.

Download by QR code or link: [www.sds-id.com/100023-7](http://www.sds-id.com/100023-7)

#### Contents/Main Components

005190-...	LipidEx
	<span style="border: 1px solid black; padding: 2px;">Cont.</span> CFC composition, non-reactive components.
	Use for analytical purposes only.
	The product is highly volatile.
	Storage in refrigerator or freezer.
005190-0010:	1x 10ml LipidEx
005190-0100:	1x 100ml LipidEx

#### Procedure

Sample:	volume parts (VP)	2.5 ml	1.5 ml
SA Serum or plasma	1.5 VP	1500 µl	750 µl
R LipidEx	1.0 VP	1000 µl	500 µl

Pipette the above amounts into a 2.0ml or 1.5ml reaction vessel made of PP (polypropylene, e.g. Eppendorf SafeLock tubes), close and shake well on a shaker for at least 2 minutes (up to 15 minutes for older and extremely turbid samples).

Then, preferably in a microcentrifuge, centrifuge the vessels as sharply as possible: ≥ 3 minutes at ≥ 10000rpm. Alternatively in a laboratory centrifuge: ≥ 10 minutes at ≥ 3500rpm.

The centrifugation results are generally better in a microcentrifuge.

(rpm = rotations per minute)

#### Attention!

Do not use polystyrene (PS) containers!

Only PP (polypropylene) and glass were tested and found suitable. Check other materials, if necessary.

After centrifugation you can observe three superimposed and sharply separated phases:

- The top one contains the clarified patient material.
- A mostly concentrated turbid middle layer (lipids).
- The bottom one contains LipidEx.

The supernatant patient material can then very easily be lifted off into a second vessel with a piston pipette. Take care not to suck in any material from the intermediate layer (preferably several times with a smaller pipette size (200... 500 µl). If necessary, centrifugation can be repeated.

If the sample was strongly mixed, repeat the entire procedure with the already removed supernatant and fresh LipidEx.

The patient material should be separated as soon as possible after centrifugation.

#### Nomenclature

SA = Sample  
R = Reagent

#### Calculation

No dilution of the sample takes place, therefore the use of a calculation factor is not given.

The extracted clarified phase represents the purely aqueous phase of the patient material. Analysis results therefore refer exclusively and correctly to the pure aqueous volume fraction and not to the total volume of serum/plasma including lipids.

This is of particular advantage and importance for the determination of electrolytes.

#### Interferences

Do not apply LipidEx to samples if parameters such as cholesterol, triglycerides or lipids are to be investigated, or split these samples beforehand for the analytes.

Since antibody-antigen bonds often dock to lipids, such methods can produce false results by removing lipids.

It is recommended to review each analytical method in which suitable (non-lipemic) serum is both treated with LipidEx and untreated and the result is compared.

## Notes

The stated volumes do not have to be exactly adhered to, as no dilution takes place. However, the sample volume should not exceed 1.5 times the LipidEx volume, as otherwise a clean separation of the lipids is not guaranteed.

LipidEx residues already used must not be used for other samples.

LipidEx contains a mixture of solvents with very low vapour pressure; any resulting inaccuracies during pipetting can be neglected as no dilution takes place.

LipidEx contains an organic solvent and can attack various plastics. Tubes made of PP (polypropylene) or glass should be preferred. Other plastics must be tested. PS (polystyrene) tubes are attacked and cannot be used. Eppendorf-Safe-Lock reaction vessels are suitable, for example.

### **Classifications**

Not for human diagnostics.

### **Support/Info Service**

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

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

### **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.

## Literature

- (1) A. Sieber, Laboratoriumsblätter 27 (3), 109 (1978).
- (2) H.W. Voigt, Medical Laboratory Vol. 6, 43 (1979).