

Product Information

Carrez Clarification Reagent Kit

Catalog Number **MAK191**
Store at Room Temperature

TECHNICAL BULLETIN

Product Description

The Carrez Clarification Reagent Kit is suitable for the preparation of samples for the analysis of small molecules such as carbohydrates, alcohols, aldehydes, and organic acids. The samples might contain proteins, fats, and redox compounds that interfere with the analysis. The Carrez Clarification Reagent Kit removes these interfering compounds from the analytes and is simpler, less expensive, and less time-consuming than using spin filters.

The Carrez Clarification Reagent Kit can be used for the preparation of samples from food (such as meat, cereal, or milk) or blood for further analysis (such as HPLC or bioassays). The reagents in this kit cannot be used to prepare samples that contain or may be converted to ascorbate, ammonia, or citrate in enzyme-based assays.

Components

The kit reagents are sufficient for clarification of 100 samples.

Carrez Reagent I	500 µL
Catalog Number MAK191A	

Carrez Reagent II	500 µL
Catalog Number MAK191B	

Reagents and Equipment Required but Not Provided

- 0.22 µm syringe filters (optional for samples with low analyte concentrations) (Catalog Number SLGN033NS)
- 0.1 M Phosphate Buffer Solution, pH 7.5 (optional for samples with low analyte concentrations) (Catalog Number P5244)

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Warning: Exposure of Carrez Reagent I to strong acids must be avoided as it may produce toxic cyanide gas.

Preparation Instructions

Briefly centrifuge vials before opening. Use ultrapure water for the preparation of reagents.

Carrez Reagents I and II are ready to use solutions.

Storage/Stability

The kit is shipped at ambient temperature and storage at room temperature is recommended.

Procedure

1. Homogenize 10 mg of the sample in 100 µL of ultrapure water to obtain a uniform suspension. Transfer the suspension to a microcentrifuge tube.
2. Add 5 µL of Carrez Reagent I to the suspension and mix thoroughly by vortexing.
3. Add 5 µL of Carrez Reagent II to the mixture and vortex until homogenous.
4. Centrifuge at $10,000 \times g$ for 2 minutes. Transfer the clear supernatant to fresh tubes.

5. Dilute samples with high analyte concentrations 100-fold using ultrapure water before use.
6. Samples with low analyte concentrations may be processed with minimal dilution by precipitating the excess zinc ions from the Carrez Reagent II. Adjust the pH of the sample to ~7.5 by adding 0.1 M phosphate buffer at approximately 1:1 ratio with the sample. Centrifuge briefly or filter through a 0.22 μm syringe filter to remove $\text{Zn}(\text{OH})_2$ precipitate.

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