

**Addendum to Urine Chemistry CH-240**

See individual procedures for each Chemistry for collection and storage information.

The following Urine samples are collected with no additives or and can be run with no pH adjustment.

 Amylase

 Urea Nitrogen(BUN)

 Creatinine

 Glucose

 Sodium

 Potassium

 Chloride

 Osmolality

 Urine Calcium and Phosphorus samples can be collected with no additives, BUT must have the pH adjusted to between 1.5 and 5.0.

 Calcium

 Phosphorus

Acidification

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| IMPORTANT: | The acidification procedure is intended for patient specimens only. Do not adjust the pH of quality control or calibration materials. |

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| IMPORTANT: | Acidified urine specimens should have a pH range of 1.5 to 5.0. Samples with urine pH below 1.5 may result in a negative bias. |

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| IMPORTANT: | If running multiple assays from a single acidified sample, ensure that the pH of the sample is appropriate for all assays programmed. For example, when processing samples for urine Ca or urine Phos and urine Mg, verify that the sample pH range is 3.0 to 4.0. Refer to Instructions for Use VITROS Chemistry Products Mg Slides for pretreatment instructions. |



 **Acidification of an Aliquot from a 24 Hour Specimen**

1. Check the pH of the Specimen
2. Thoroughly mix the entire urine specimen and remove a 5 mL aliquot.
3. Add 100 µL of 6 N HCl and mix thoroughly.
4. Verify that the specimen pH is 1.5 to 5.0 and adjust, if necessary.
5. Centrifuge the Specimen.
6. Analyze the sample.

 **Acidification of a Random Urine Specimen**

1. Check the pH of the Specimen
2. Thoroughly mix the specimen
3. Add a drop of 6 N HCl and mix thoroughly.
4. Verify that the specimen pH is 1.5 to 5.0 and adjust, if necessary.
5. Centrifuge the Specimen.
6. Analyze the sample.

 Magnesium Urine samples can be collected with no additives, BUT must have the pH adjusted to between 3.0 and 4.0.

***Acidification***

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| **IMPORTANT:** | *The acidification procedure is intended for patient specimens only. Do not adjust the pH of quality-control or calibration materials.* |

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| **IMPORTANT:** | *If running multiple assays from a single acidified sample, ensure that the pH of the sample is appropriate for all assays programmed.* |

 **Acidification of an Aliquot from a 24 Hour Specimen**

1. Check the pH of the Specimen
2. Thoroughly mix the entire urine specimen and remove a 5 mL aliquot.
3. Add a drop of 6 N HCl and mix thoroughly.
4. Verify that the specimen pH is 3.0 and 4.0 and adjust, if necessary.
5. Centrifuge the Specimen.
6. Analyze the sample.



 **Acidification of a Random Urine Specimen**

1. Check the pH of the Specimen
2. Thoroughly mix the specimen
3. Add a drop of 6 N HCl and mix thoroughly.
4. Verify that the specimen pH is 1.5 to 5.0 and adjust, if necessary.
5. Centrifuge the Specimen.
6. Analyze the sample.

Random Uric Acid samples can be collected with no additives, BUT must have the pH adjusted to between 8.5 and 10.0.

***Alkalization Procedure***

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| **IMPORTANT:** | *The alkalization procedure is intended for patient specimens only. Do not adjust the pH of quality-control or calibration materials.* |

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| **IMPORTANT:** | *Due to the sample pretreatment protocol for urine uric acid analysis, the VITROS Integrated System will not allow URIC to be programmed with other urine assays.* |

1. Thoroughly mix the urine specimen.
2. Pipette a 5 mL aliquot of urine into a separate test tube.
3. Dropwise, add 1 N KOH or NaOH mixing thoroughly after the addition of each drop. Check the pH frequently to obtain a pH between 8.5 and 10.0.