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**Lab Dept:** Urine/Stool

**Test Name:** OSMOLALITY, URINE

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***General Information***

**Lab Order Codes:** UOSM

**Synonyms:** Osmo, Urine

**CPT Codes:** 83935 – Osmolality, urine

**Test Includes:** Urine osmolality in mOSM/kg

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***Logistics***

**Test Indications:** Determination of plasma and urine osmolality can be useful in the assessment of electrolyte and acid-base disorders. Comparisons can determine the status of renal water regulation in instances of severe electrolyte disturbances, as might occur in diabetes insipidus.

**Lab Testing Sections:** Chemistry

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 4 hours

**Special Instructions:** N/A

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***Specimen***

**Specimen Type:** Urine, random collection

**Container:** Plastic leakproof container (No preservatives)

**Draw Volume:** 1 - 3 mL from a random urine collection

**Processed Volume:** Minimum: 0.5 mL urine

<b>Collection:</b>	A random urine sample may be obtained by voiding into a urine cup and is often performed at the laboratory. Bring the refrigerated container to the lab. Make sure all specimens submitted to the laboratory are properly labeled with the patient's name, medical record number and date of birth.
<b>Special Processing:</b>	Lab Staff: Centrifuge specimen, aliquot supernatant into a plastic cup. Run within 4 hours or store at refrigerated temperatures.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Mislabeled or unlabeled specimens

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### ***Interpretive***

<b>Reference Range:</b>	<1 month: 50 - 600 mOSM/kg ≥1 month: 50 - 1400 mOSM/kg
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	N/A
<b>Methodology:</b>	Freezing Point Depression
<b>References:</b>	Advanced Instruments Osmometer Model 2020 User's Guide, 2025 Rev16, 081508, Two Technology Way, Norwood, Mass. 02062  Tietz Textbook of Clinical Chemistry and Molecular Diagnostics (2006) Elsevier Saunders Company, pp. 991 - 994  Jacobs & DeMott Laboratory Test Handbook (2001) Lexi-Comp, Inc, Hudson, OH, 5th Edition, pp 236-237