

## Acetoacetic Acid, Lithium Salt

**Catalog No.** CSI20345A **Quantity:** 5 g  
CSI20345B 10 g

**Alternate Names:** Lithium acetoacetate, ketone indicator

**Description:** Urine Ketone: acetoacetic acid is used for Ketone sensitivity in Urine Test strips.

**Ketone Chemical Principle:** Legal's test-nitroprusside reaction. Use Acetoacetic acid in an alkaline medium that reacts with nitroferricyanide to produce a color change from beige to purple on the urine strip.

Urine Ketone(s) such as (beta-hydroxybutyric acid, acetoacetic acid, and acetone) are the end-product of rapid or excessive fatty acid breakdown. It is important to note that only acetoacetic acid reacts with sodium nitroprusside reagent. As with glucose, ketone(s) are present in the urine when the blood levels surpass a certain threshold. Fatty acid release from adipose tissue is stimulated by a number of hormones including glucagon, epinephrine, and growth hormone. The levels of these hormones are increased in starvation, uncontrolled diabetes mellitus, and a number of other conditions.

A positive test for urine ketone(s) may indicate: Metabolic abnormalities, including uncontrolled diabetes or glycogen storage disease, Abnormal nutritional conditions, including starvation, fasting, anorexia, high protein or low carbohydrate diets, Prolonged vomiting, including hyperemesis gravidarum, Ketone testing also indicates Disorders of increased metabolism, including hyperthyroidism, fever, acute or severe illness, burns, pregnancy, lactation or post-surgical condition

**Solubility:** (5% in water), clear, colorless

**Purity:** Typically >95% Pure

**Appearance:** White powder

**Molecular Weight:** 108.00

**Formulation:** Crystalline

**Formula:** C<sub>4</sub>H<sub>5</sub>LiO<sub>3</sub>

**Storage & Stability:** < -20° C. Expiration 5 years after manufactured date.

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