**Acetone**

**ACS Reagent**

**Product Number** 17,912-4

**Exact replacement for Product Number A 4206**

**Product Description**

Molecular Formula: C₃H₆O  
Molecular Weight: 58.08  
CAS Number: 67-64-1  
Density: 0.788 g/ml (25 °C)  
Boiling point: 56.5 °C  
Synonyms: 2-propanone, dimethyl ketone, β-ketopropane

This product is designated as ACS Reagent grade, and meets the specifications of the American Chemical Society (ACS) for reagent chemicals.

Acetone is a commonly used material in the manufacture of various chemicals. These chemicals include methyl isobutyl ketone, mesityl oxide, diacetone alcohol, acetic acid (via the ketene process), iodoform, and bromoform. Other products where acetone is utilized in manufacture include rayon, photographic films, and paint and varnish removers.

In chemical synthesis, acetone has been utilized in the synthesis and isolation of both organic and inorganic compounds and complexes. These include tert-butanesulfinamide, terpenes, thiol-stabilized gold colloids, calixphyrin macrocycles, and trispyrazolylborate platinum(II) hydride complexes.

Acetone is also used in HPLC analysis of organic and inorganic species, including gold nanoparticle clusters and plant oils. Acetone has been utilized in protein crystallization.

A protocol for the preparation in acetone of cyanogen bromide-activated diol-silica for application high-performance affinity chromatography has been described.

**Precautions and Disclaimer**

For Laboratory Use Only. Not for drug, household or other uses.

**Preparation Instructions**

This product is miscible with water, alcohol, DMF, chloroform, ether, and most oils.

**References**

1. The Merck Index, 12th ed., Entry# 64.