



TECHNICAL DATA SHEET

Product Name: Coenzyme A
CAS Number: 85-61-0
Molecular Formula: C₂₁H₃₆N₇O₁₆P₃S
Molecular Weight: 767.53
EINECS No.: 201-619-1
EC Code: Not allocated

1. Product Description

Coenzyme A is a biologically active cofactor essential for numerous enzymatic reactions in living organisms. It plays a key role in the metabolism of fatty acids, carbohydrates, and amino acids by acting as an acyl group carrier. It appears as a white to off-white amorphous or lyophilized powder. Due to its high biological activity and sensitivity, it is mainly used in pharmaceutical research, biochemical studies, and specialized nutritional formulations.

2. Specification

Parameter	Specification
Appearance	White to off-white powder
Assay (CoA content)	≥ 90.0%
Purity (HPLC)	≥ 95.0%
Solubility	Freely soluble in water
pH (1% solution)	6.0 – 8.0
Water Content	≤ 5.0%
Residual Solvents	Complies with ICH guidelines
Heavy Metals (Pb)	≤ 10 ppm
Arsenic (As)	≤ 2 ppm
Microbiological Standards	
Total Plate Count	≤ 100 CFU/g
Yeast & Mold	≤ 10 CFU/g
E. coli	Negative
Salmonella	Negative

3. Applications

- Biochemical research – enzymatic and metabolic studies
- Pharmaceutical intermediates – metabolic pathway research
- Laboratory reagents – biochemical assays
- Nutritional research – energy metabolism studies
- Biotechnology applications – cofactor-dependent reactions

4. Packaging & Storage

- **Packaging:** 1 g / 5 g / 10 g sterile vial or customized packaging under inert conditions
- **Shelf Life:** 24 months when stored properly (typically frozen conditions recommended)
- **Storage Conditions:** Store at -20°C or lower, protected from light and moisture

5. Regulatory Status

- Research grade / biochemical reagent grade
- Manufactured under ISO-certified and controlled laboratory conditions
- Not intended for direct food use unless specified pharmaceutical grade
- Non-GMO, BSE/TSE-free