



METALTEK
Metalurji Sanayi ve Ticaret A.Ş.

Cobalt Acetate Tetraahydrate

INTRODUCTION

Cobalt acetate ($\text{Co}(\text{CH}_3\text{COO})_2$) usually has 4 units of water of crystallization. Cobalt acetate can be obtained from the reaction of cobalt oxide or hydroxide with acetic acid. This substance is the main catalyst of PTA industry and an essential compound in fiber and PET manufacturing processes.



Chemical Analysis				
Item	Specification		Unit	Test Method
Purity	99	Min.	% wt	XRF
Cobalt	24	Min.	% wt	ICP
Lead	0.005	Min.	% wt	ICP
Iron	0.005	Min.	% wt	ICP
Zinc	0.003	Min.	% wt	ICP
Copper	0.005	Min.	% wt	ICP
Nickel	0.002	Min.	% wt	ICP
pH	5	Min.	-	pH meter
Chloride	0.003	Min.	% wt	Ion Chromatography
Sulfate	0.005	Min.	% wt	Ion Chromatography
Nitride	0.01	Min.	% wt	Ion Chromatography



Physical Properties	
Molar mass	249.08 g/mol
Appearance	Pink crystal
Odor	Vinegar
Density	1.705 g/cm ³
Melting point	140°C
Solubility in water	Soluble
Solubility	Alcohol, dilute acids, pentyl acetate

SAFETY

- ◆ Continuous inhalation of cobalt compounds causes respiratory problems such as asthma, pneumonia, shortness of breath and some lung diseases such as arteriosclerosis.
- ◆ Prolonged exposure to radioactive cobalt causes hair loss, nausea, bleeding and coma.

REACTIONS AND USES

Cobalt acetate is a precursor to various oil drying agents, catalysts that allow paints and varnishes to harden.

Anhydrous cobalt acetate is a widely used source of cobalt in the synthesis of materials, catalyst, and complexes.

