

# **DETERMINATION OF TOXIC HEAVY METALS IN DIFFERENT BRANDS OF TALCUM POWDER**

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## **ABSTRACT**

Talcum powder is a cosmetic product made from finely ground talc, an extremely soft mineral. One of the most common uses of talcum powder is in baby care, Talcum powders are widely used all over the world to keep the body dry due to sweat, for fragrance and for beauty purposes. The present research work is done for the determination of heavy metals like Cd, Co, Pb, Cu and Cr in 30 different brands of talcum powder. Determination of heavy metals was done by atomic absorption spectrophotometer and pretreatment of samples was done by acid digestion by using Conc. HNO<sub>3</sub> and H<sub>2</sub>O<sub>2</sub>. The lead contents in all brands were in the range of 0.0006-1.05 ppm, while cadmium contents were in the range of 0.001-0.080 ppm and chromium contents were 0.08-0.35 ppm, copper contents were 0.07-0.35 ppm, cobalt contents were 0.003- 0.180 ppm ranges were present. The lead concentration was extremely high in all brands followed by the cadmium. Cadmium concentrations were low in all brands. All the metals are present with in safe limits in under study all the brands.

**KEYWORDS:** Acid Digestion, Atomic Absorption Spectrometer, Heavy Metals Talcum Powder, Toxic