

# **“Purification of Fertilizer Grade Phosphoric Acid by Partial Precipitation”**

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## **Abstract:**

The fertilizer grade phosphoric acid currently produced in most places contains high levels of impurities. Up until recently said impurities were not a major concern. However, as impurity levels rise, the use of fertilizer grade acid has become problematic. The impurities of greatest concern are magnesium, iron, aluminum, fluorine, cadmium, arsenic, and heavy metals such as lead. Many users have attempted to get around the problem by using or trying to build facilities for the production of purified acid via solvent extraction is extremely costly and impractical in many cases. Prado & Associates proposed a milder approach to the problem by using selective and partial precipitation of impurities. We have actually done extensive testing at our facilities in Tampa and we present our results, conclusions, and recommendations in this paper.