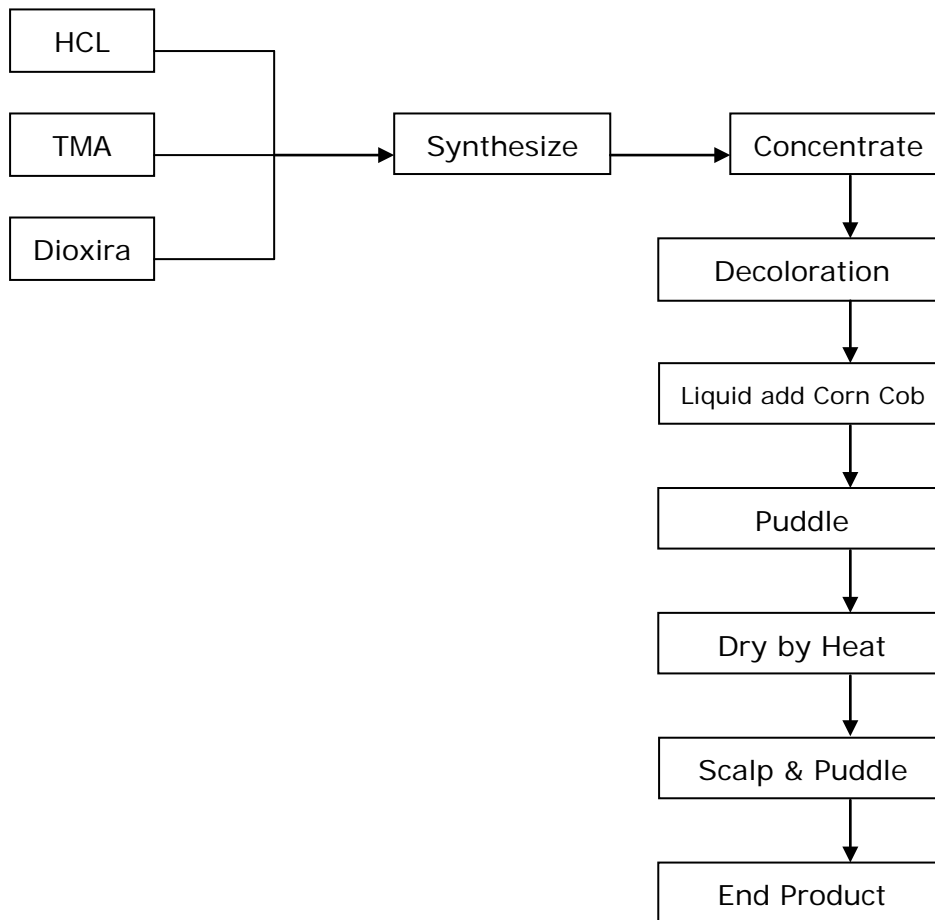


Manufacturing Flow Chart for Choline Chloride



Choline Chloride Manufacturing Process

The product is manufactured in three steps batch process, which involves neutralization of Hydrochloric Acid with Trimethyl Amine to form Trimethyl Amine Hydrochloride. Ethylene Oxide is then added to Trimethyl Amine Hydrochloride to form Choline Chloride solution. The solution is then concentrated under vacuum to a pre determined percentage solution. Dry Choline Chloride is produced by blending in a mixer batch wise Liquid Choline Chloride with solid carriers. This blend is then fed to a Rotary Dryer where moisture is removed. This is then fed in Rotary Cooler to bring down the temperature of the mass to Atmospheric Temperature. Finally the dry choline chloride is Milled and filled in bags.