



IS 11657:2020 Phosphorus Oxychloride, Technical- Specification

Phosphorus oxychloride finds wide use as a catalyst and chlorinating agent in dyestuff industries, pesticides and pharmaceutical industries. Phosphorus oxychloride is an important starting product for the manufacture of phosphoric acid, triesters, obtained from reactions of POCl_3 with alcohols, phenols and epoxides. These esters are used in plasticizers as additives for motor fuels and lubricating oils. The material is in the form of a **colorless to pale yellow** fuming liquid with **irritating odour**. In order to have a pure and effective product, standard prescribes the requirements of **Boiling Range, Relative density and assay** which inform the **purity** of the product and should be greater than 98% by mass of Phosphorus oxychloride. The standard do take care of **toxic element Arsenic** through limiting its content in the product which has detrimental effect on the human health. Iron act as a inhibitor in many reactions and thus reduces the effectiveness of this compound and in order to tackle this the standard prescribes the maximum limit for the Iron in Phosphorus Oxychloride.

Thus, the standard takes well care of the **effectiveness, purity and health** aspect of the users of Phosphorus Oxychloride.