

PHARMACEUTICAL ANALYSIS – BP102T

UNIT: III PRECIPITATION TITRATION, COMPLEXOMETRIC TITRATION,
GRAVIMETRY AND DIAZOTISATION TITRATION

CLASS:25

TOPIC: MASKING AND DEMASKING AGENTS

Masking agents:

A masking agent is a reagent used in chemical analysis which reacts with chemical species that may interfere in the analysis.

In sports a masking agent is used to hide or prevent detection of banned substance or illegal drug like anabolic steroids or stimulants.

Diuretics are the simplest form of masking agent and work by enhancing water loss via urine excretion and thus diluting the urine, which results in lower concentrations of the banned substance as more of it is being excreted from the body making it more difficult for laboratories to detect

Masking agents:

tri ethanol amine— iron, aluminium

triglycerol — copper

potassium/sodium cyanide — heavy metals

ammonium fluoride — iron, aluminium

Demasking agents:

Demasking agent is the agent which dissociates the masking agent and metal ion and makes the metal ion free. Now the metal ion is going to be titrated with concern titrant for estimation metal ions

Examples: formaldehyde, chloral hydrate Techniques of demasking agents:

By altering PH

By changing oxidation state of metal ions in the complex

By volatilization of complex

By replacement of metal ion from the complex with another metal ion

RRCP