

Aim :-

To introduce the laboratory technique of Anthraquinone from Anthracene.

Reference :-Requirement :-

- (a) Glassware - Beaker, Glass rod, Measuring cylinder, Heating mantle.
- (b) Chemical - Water, Anthraquinone Anthracene.

Theory :-

Anthraquinone :- It is an aromatic organic compounds with formula  $C_{10}H_8O_2$ . It is a building block of many dyes and used in bleaching pulp for papermaking. It is yellow, highly crystalline solid poorly solvent. It is almost completely insoluble in ethanol near room temp but 2.25g will dissolve in 100 g of boiling ethanol. It is found in nature as are mineral lodite over composition consumption of anthraquinones cause

Teacher's Signature \_\_\_\_\_



abdominal cramps, gastrointestinal discomfort vomiting, dormant nausea, blood diarrhea and dizziness, moreover biological active anthraquinones derived from reactive blue 2 have been utilized as valuable tool compound for biochemical and pharmacological studies they may serve as lead structure for development of future drug.

Precaution :→ Lowest effective dosage should be employed prolonged indiscriminate use to be avoided. Abdominal surgery pregnancy children below 6 yrs.

Anthracene :→ It is tricyclic aromatic hydrocarbon found in coal tar and used for as starting material for manufacture of dyestuff. crude anthracene crystallize from a high boiling coal-tar fraction.

It is purified by crystallisation and sublimation. Pure anthracene crystallize in colourless monoclinic plate which show a blue fluorescence under ultraviolet radiation. It is used in dyestuff insecticides and wood preservative and coating material.

Anthracene is commonly used as a tracer in conformal coating applied printed wiring boards. It is also used as smokescreen counter crystal and inorganic semiconductor research.



Side effect:→

- Anthracene can affect you when breathed in.
- Skin contact can cause ~~to~~ irritation itching and burning which is greatly aggravated by sunlight repeated contact can cause thickening of skin and pigment change.
- Eye contact can cause irritation and burning.
- Breathing anthracene can irritate the nose, throat causing coughing wheezing.
- It may cause skin allergy which itching and skin rashes.