



ESTD : 1983

Rayat Shikshan Sanstha's

Karmaveer Bhaurao Patil College of Engineering, Satara

Chemistry Laboratory

Do's

- **Follow the safety precautions of lab.**
- **Switch off the electrical equipment when not in use.**
- **Before leaving the laboratory, make sure your work area is clean and dry.**
- **Before leaving the lab, ensure that all gas valves and water taps are completely turned off.**
- **Switch off the tube lights & fans while leaving the laboratory.**

Don'ts

- **Use of mobile / any other personal gadget is strictly prohibited.**
- **Do not operate the equipment without prior permission.**
- **Do not pipette out hazardous chemicals.**
- **Do not make noise in the laboratory.**

KB PCOE



FIRST AID BOX



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FILM

NON-POROUS OXIDE:

1. $4Al + 3O_2 \rightarrow Al_2O_3$
 2. $2Zn + O_2 \rightarrow 2ZnO$
 3. $4Cr + O_2 \rightarrow 2Cr_2O_3$

VOLATILE OXIDE FILM:

1. $4Mo + 3O_2 \rightarrow 2Mo_2O_3$

Diksha Manohar Kumbhar (08)
Samruddhi Kisan Mane (09)
(FYE 47C)

TYPES OF COAL

1. PEAT	2. LIGNITE	3. BITUMINOUS COALS	4. ANTHRACITE COAL
<ul style="list-style-type: none"> • Characteristics <p>It is the least matured form of coal. It has a high water content (40-60%) and a low calorific value (10-15 MJ/kg).</p> <p>It is a brownish-black, fibrous material with a low density.</p> <p>It is easily ignitable and has a low melting point.</p> <p>It is used as a fuel for generating electricity and for industrial purposes.</p>	<ul style="list-style-type: none"> • Characteristics <p>It is intermediate in rank between peat and bituminous coal. It has a higher calorific value (15-25 MJ/kg).</p> <p>It is a brownish-black, fibrous material with a higher density than peat.</p> <p>It is more difficult to ignite than peat but has a higher melting point.</p> <p>It is used as a fuel for generating electricity and for industrial purposes.</p>	<ul style="list-style-type: none"> • Characteristics <p>It is the most matured form of coal. It has a high calorific value (25-30 MJ/kg).</p> <p>It is a dark brown or black, solid material with a high density.</p> <p>It is difficult to ignite and has a high melting point.</p> <p>It is used as a fuel for generating electricity and for industrial purposes.</p>	<ul style="list-style-type: none"> • Characteristics <p>It is the most matured form of coal. It has the highest calorific value (30-35 MJ/kg).</p> <p>It is a dark brown or black, solid material with the highest density.</p> <p>It is very difficult to ignite and has the highest melting point.</p> <p>It is used as a fuel for generating electricity and for industrial purposes.</p>
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BRANCH :-
Mechanical Engineering [AI]

Undertaken by :- Prof. Komane A.R.

NAME :-
Jagdale Nikita Dipak
Sakshi Utam Kodam
Prachi Ravindra Bamone



