

TANIUM DIOXIDE

Chemical formula:- TiO_2

Mol.Wt :-79.90

STD:-It contains not less than 98% of TiO_2

w.r.t. substance

Properties:-

- Colour: White
- Odour:- odourless.
- Nature:- Amorphous & fluffy powder
- Taste :- tasteless
- Solubility:-. practically soluble in water, & in dil mineral acid it dissolves slowly in Hot H_2SO_4 .

Storage:- Store in well closed container.

Uses :-

1. Topical preparation due to its opacity nature.
2. due to its opacity nature it is used for screening out the UV radiations in various sun creams & sunscreen product to prevent sunburn.
3. Due to its white colour it is used in cosmetic preparation & in paints.

Silicon Polymers

Synonyms:-Dimethicone, Simethicone, Dimethicone, polysiloxane, silicone oils.

Properties & uses of Silicones

- The silicone polymers are generally known as **silicone oils**.
- The silicone polymers are prepared synthetically by polymerization reaction.
- The oily nature of these compounds makes it useful as water repellent and protective to skin from contact irritants.
- The silicone oils, thus in general act as protective, it also act as an Antiflatulents and used in varying amount in antacid preparations.

- **Dimethicone:**

- It is an inert silicone, oily in nature, it is stable and has low surface tension.
- It forms a protective layer on skin like plastic and acts as water protective agent.
- It is mainly used in ointments, sprays, lotions and creams.

Simethicone :

- It occurs as a light gray, translucent liquid with greasy consistency. It is prepared from dimethylpolysiloxane.
- It is used as an Antiflatulents and is employed in antacid, antispasmodic, sedative and digestant preparations in 40 - 80 mg dose at bed time.