

TECHNICAL TUESDAYS

TOPIC: Parameters to be considered in Scouring of Textiles

REF: TT/ Apr 2015/ WK 3

What is Scouring?

Scouring is the process of removing impurities present in cotton fibre. The natural impurities are pectins, ash, waxes and mineral compounds, etc. If the impurities present in cotton fibre are not removed, it creates difficulties in dyeing or printing the textile fabric uniformly.

Both of these processes (saponification and emulsification) take place in a typical scouring process. In addition, the scouring process softens and swells the fibres to facilitate their destruction during bleaching.

Depending on the amount of impurities and the reaction and wash conditions, the loss in weight of raw cotton material due to boil-off can reach up to seven percent or even higher in case of high-impurity cotton.

The important parameters to be considered in scouring process are as follows:

- Concentration of caustic soda
- Type and concentration of auxiliaries
- Treatment temperature
- Reaction time

Quality parameter requirement of wetting agents used in scouring:

- It should have an excellent wetting ability within a wide temperature range.
- It should permit a good washing effect and have a high emulsifying power for natural fats, waxes and oils.
- It should be resistant to oxidants and reducing agents.
- It should be resistant to water hardening substances.
- It should be highly stable to alkalinity.
- It should be biodegradable and non-toxic.

Wishing you a great week ahead!

Technical Tuesdays is a knowledge sharing initiative by Resil Chemicals Private Limited
arc@resil.com | www.resil.com