

# **TECHNICAL BULLETIN**Textile Processing Compound

#### Let You LEAD The Process

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Merc NC	_
(Non-Cresylic Mercerising wetter)	
	'Merc NC' is an excellent and powerful non-cresylic wetting agent particularly developed for the mercerising process to enhance rapid and uniform penetration of caustic soda liquor into the Cellulosic substrate for optimizing luster and dyeability.
Features	<ul> <li>✓ Has very high penetrating action in caustic soda solution of mercerising strength (26% / 52degTw).</li> </ul>
	Is compatible with higher strength of caustic soda solution and is applicable over a wide range of temperature.
	✓ Is non-cresylic based and hence free from handling hazard.
	✓ Can be used effectively in the causticisation of viscose rayon goods.
	✓ NO ADVERSE EFFECT on automatic caustic strength controls.
	<ul> <li>PROMOTES RAPID PENETRATION of caustic into heavily sized cotton fabrics.</li> </ul>
	✓ NONTOXIC - non-irritating to personnel.
	✓ DEFOAMS - caustic bath.

Type Anionic/Non-ionic

**Constitution** Special blend of alcohol sulphates

Appearance Pale Yellow liquid

**Solubility** Easily miscible with caustic soda liquors to give clear solutions of high stability.

**Compatibility** Stable to alkalies, electrolytes and hard water.

**Storage** Stable under normal conditions.

**Application** In the mercerisation of cotton fabrics or yarn, it is imperative that the mercerising

liquor penetrates and is evenly distributed throughout the material, thus giving uniformity of lustre and finish. The material to be mercerised is in contact with the liquor only for a short period, and it is necessary that during this short duration, maximum penetration is obtained. The addition of a powerful alkali stable wetting

agent to the mercerising liquor is therefore necessary for best results.

'Merc NC' is a unique and excellent wetting agent with high solubility in concentrated aqueous solutions of caustic soda. It is an ideal wetting agent for

mercerising.

The product appearance varies from batch to batch. The colour & viscosity may vary from batch to batch and its intensity is not an indication of product strength.

#### 1. Mercerising of grey cotton:

Low twisted yarn

Tightly woven fabric

'Merc NC'

2-5 g/l

3-4 g/l

### 2. Mercerising of boiled cotton

'Merc NC'

1 - 2 g/I

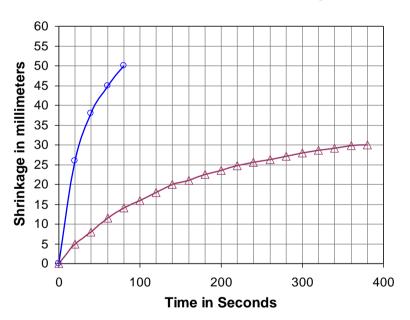
Circulation of the mercerising liquor is necessary for good distribution of 'Merc NC' after long standing periods, e.g. over night.

Waste mercerising liquors containing 'Merc NC' can be used without problems for boiling off and kiering. In recovery plants 'Merc NC' can successfully be concentrated by evaporation because of his bath stability and low-foaming properties.

**Test Method:** 

The efficiency of a mercerising assistant can be ascertained by noting the shrinkage of a measured length of yarn, when it is immersed in the mercerising liquor containing the wetting agent and also finding out the shrinkage in plain caustic soda solution. The shrinkage is noted every 10 seconds and the graph given below will illustrate the extreme efficiency of 'Merc NC' in causing the shrinkage of the yarn. The shrinkage is due to the penetration of caustic soda solution in the yarn leading to swelling and thus gives an indication of the effectiveness of 'Merc NC' in mercerising.

## Effect of Merc NC on Shrinkage



O - 56Deg Tw NaOH + 0.2% Merc NC  $\Delta$  - 56Deg Tw NaOH only