

Trilon® B Liquid and Trilon® BX Liquid

Organic chelating agents for pulp bleaching

Wood pulp coming from the production process has a dark brown color, a bleaching step is required to provide white fibers. Chelating agents, dissolving interfering metal ions like: Fe³⁺, Mn²⁺ and Cu²⁺ present in cellulose, enhance the bleaching treatment. They prevent the premature decomposition of bleaching chemicals, like hydrogen peroxide and peracids, allowing savings.

The use of **Trilon® B Liquid** and **Trilon® BX Liquid** (EDTA) in a chelating stage at pH 4 to 7 removes the interfering metals, but not the desirable ions: Ca²⁺ and Mg²⁺. As a consequence, the addition of water glass during bleaching with peroxide is largely superfluous.

Portfolio

Industrial Solutions offer 2 different grades:

- **Trilon® B Liquid** (40% active* aqueous solution)
- **Trilon® BX Liquid** (40% active* aqueous solution)

*Calculated as EDTA-Na₄ (MW 380 g/mol)



Stability constants

Metal ion	Fe ³⁺	Mn ²⁺	Cu ²⁺	Ca ²⁺	Mg ²⁺
Log K*	25.1	13.8	18.8	10.6	8.7

*Logarithmic stability constants for EDTA complexes with metal ions

Properties

- **Trilon® B Liquid** and **Trilon® BX Liquid** form soluble complexes with polyvalent ions, the metal ion is completely enclosed by the ligand. These complexes remain stable, within their specific range of pH, even at temperatures up to 100 °C.
- **Trilon® B Liquid** and **Trilon® BX Liquid** are chemically stable, even when heated up to 200 °C under pressure. They are very resistant compared to other organic complexing agents like: citric acid, tartaric acid and gluconates, especially at high temperatures.
- **Trilon® BX Liquid** provides 10% dosage savings vs. standard EDTA, thanks to its high purity form

Food contact information

Product	BfR XXXVI	FDA 21	China GB 9685-2016
Trilon® B Liquid	No	No	No
Trilon® BX Liquid	Yes*	Yes*	Yes*

*Specific BfR recommendations/FDA paragraphs with restrictions according to "Food Contact Information" document as provided by BASF. The listings in the food-contact paragraphs are with limitations. Please contact your regular BASF contact for detailed and complete food-contact status

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Labeling

Details about the classification and labeling of our products and further advice on safe handling are contained in the current safety data sheets.

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