TUSI HAYTHAM BIO LIMITED
Chemistry for a Greener Planet

Technical Data Sheet

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TUSCRA ONE™ Series - Tuscra DSS

Integrated Scouring & Bleaching System

Manufacturer: Tusi Haytham Bio Limited

Product Description:

This system combines hydrogen peroxide bleaching, caustic soda for alkalinity, and Tuscra DSS—a multifunctional chemical incorporating detergent, sequestering, peroxide stabilizer, and anticreasing agents. It provides an efficient, simplified approach to cotton and blended fabric scouring and bleaching with excellent cleaning, whitening, fabric protection, and process stability.

Key Features & Benefits:

- **Tuscra DSS:**
  - **Detergent action for emulsifying and removing waxes and oils.**
  - **Sequesters metal ions (Fe, Cu, Mn) to prevent peroxide decomposition.**
  - **Stabilizes peroxide during bleaching to ensure consistent whiteness.**
  - **Anticreasing agent to minimize fabric creasing during processing.**
- **Improved fabric whiteness, absorbency, and feel.**
- **Reduced fiber damage and fabric defects.**
- **Compatible with both batch and continuous processes.**
- **Environmentally friendly and biodegradable formulation.**

Typical Properties of Tuscra DSS:

Property	Specification
Appearance	Clear to pale yellow liquid
pH (25 °C)	11.5 ± 0.5 (alkaline)
Ionic Nature	Anionic
Water Solubility	Fully soluble
Stability	Stable in alkaline peroxide baths

Application Guidelines:

- **Hydrogen Peroxide Dosage: 3-6 g/L (adjusted to fabric and desired bleaching level)**
- **Caustic Soda Dosage: 0.5-2.0 g/L (depending on fabric and process)**
- **Tuscra DSS Dosage: 2 – 4 g/L (added prior to peroxide heating)**

Optimize dosages by conducting preliminary trials to suit specific fabrics and processes.

Packaging & Storage:

- **Packaging: Tuscra DSS supplied in 60 kg and 120 kg HDPE drums.**
- **Storage: Store in a cool, dry place below 40 °C, away from direct sunlight.**
- **Shelf Life: 6 months in original sealed containers.**

Precautions:

- **Avoid mixing with strong acids or incompatible chemicals.**
- **Use appropriate protective gear during handling.**
- **Keep out of reach of children.**

Issued by:
Tusi Haytham Bio Limited – Technical Division
Product: Integrated Peroxide, Caustic & Tuscra DSS System
Category: Multi-Functional Scouring & Bleaching Agent