TUSI HAYTHAM BIO LIMITED
Chemistry for a Greener Planet

Technical Data Sheet

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IONEXA™ Series – Ionexa HCMF 31

High PPM Metal Binder Sequestrant

Manufacturer: Tusi Haytham Bio Limited

Product Description:

Ionexa HCMF 31 is a high-performance sequestrant designed to bind and neutralize high concentrations of metal ions such as calcium (Ca^{2+}), magnesium (Mg^{2+}), iron (Fe^{3+}), manganese (Mn^{2+}), and other heavy metals in textile processing baths.

It effectively prevents scale formation, inhibits catalytic decomposition of bleaching agents, and reduces metal-induced discoloration during wet processing.

Key Performance Properties:

- **Strong chelation of multiple metal ions at high parts per million (PPM) levels.**
- **Prevents scale and deposit formation in equipment and fabrics.**
- **Enhances stability of peroxide and other bleaching agents.**
- **Improves dye uniformity and fabric brightness.**
- **Effective across a wide pH range and temperature conditions.**
- **Compatible with common wet processing chemicals.**

Typical Properties:

Property	Specification
Appearance	Clear to amber liquid
pH (25 °C)	1-3
Ionic Nature	Anionic
Water Miscibility	Fully soluble
Stability	Stable from pH 4 to 11 and temperatures up to 90 °C

Application:

- **Use in processes where metal ion concentrations are elevated (high PPM).**
- **Typical dosage: 0.1-0.5 g/L depending on water hardness and process demands.**
- **Suitable for scouring, bleaching, dyeing, and finishing operations.**
- **Dosage should be optimized through laboratory testing.**

Precautions:

- **Avoid mixing with incompatible chemicals such as strong acids.**
- **Use personal protective equipment during handling.**
- **Store in tightly sealed containers to avoid contamination.**

Packing Size:

Available in 25 kg, 60 kg, and 120 kg HDPE drums.

Storage:

- **Store below 40 °C in a cool, dry, and ventilated area.**
- **Shelf life of 12 months when stored in original unopened packaging.**
- **“Best use before end” date is marked on the product label.**

Issued by:
Tusi Haytham Bio Limited – Technical Division
Product: IONEXA™ Series – Ionexa HCMF 31
Category: High PPM Metal Binder Sequestrant