TUSI HAYTHAM BIO LIMITED
Chemistry for a Greener Planet

Technical Data Sheet

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AVIRA™ Series – Avira NID 21

NONIONIC DETERGENT & WETTING AGENT

Manufacturer: Tusi Haytham Bio Limited

Product Description:
Avira NID 21 is a nonionic detergent and wetting agent specially formulated for textile pretreatment and dyeing processes requiring excellent wetting, detergent, and emulsifying properties.
It performs effectively under both acidic and alkaline conditions, providing outstanding cleaning and wetting action on natural and synthetic fibers.
Its nonionic nature ensures broad compatibility with other surfactants and auxiliaries used in textile and industrial formulations.

Key Performance Properties:

- **Excellent wetting, detergent, and emulsifying performance.**
- **Nonionic nature ensures compatibility with anionic, cationic, and nonionic systems.**
- **Stable under acidic, alkaline, and high-temperature conditions.**
- **Effective in hard water and resistant to electrolyte interference.**
- **Biodegradable and conforms to environmental safety standards.**
- **Suitable for pretreatment, scouring, bleaching, and dyeing processes.**

Typical Properties:

Property	Specification
Appearance	Colorless to pale yellow clear liquid
pH (25 °C)	6 ± 1
Ionic Nature	Nonionic
Water Miscibility	Completely soluble in water
Foam Character	Moderate foaming
Stability	Stable in acid, alkali, electrolyte, and hard water conditions

Application:

Avira NID 21 can be used in exhaust, continuous, and jet dyeing processes.

- **Exhaust process: 1.0 – 2.0 g/L**
- **Continuous process: 2.0 – 5.0 g/L**
- **Jet process: 0.5 – 1.5 g/L**

Dosage should be optimized by laboratory trials according to process type, fiber composition, and equipment setup.

Precautions:

- **Avoid direct contact with strong oxidizing agents.**
- **In case of excessive foam, use a compatible defoamer.**
- **Store tightly closed to prevent contamination and moisture absorption.**

Packing Size:

Avira NID 21 is available in 60 kg and 120 kg closed-mouth HDPE drums.

Storage:

- **Maximum temperature during storage and transportation: 40 °C.**
- **Store in a cool, dry, and well-ventilated area away from direct sunlight.**
- **Shelf life: 6 months when stored in original sealed container.**
- **The “Best use before end” date is indicated on the product label.**

Issued by:
Tusi Haytham Bio Limited – Technical Division
Product: AVIRA™ Series – Avira NID 21
Category: Nonionic Detergent & Wetting Agent