

Technical Data Sheet

Product Name: Nova DA101

Smart Wetting for Modern Water-Based Coatings

Version: 03/2025

1. Product Description

Nova DA101 is a highly effective dispersing agent formulated for use in water-based. It enhances pigment dispersion, improves color development, and stabilizes formulations, ensuring high-quality finishes in coatings, inks, and adhesives.

Nova DA101 is formulated with anionic surfactants, it delivers unmatched pigment dispersion, pH stability, and application smoothness.

Humid climate and demand for low-odor, high-efficiency additives make **Nova DA101** ideal for improving water-based architectural paints and flexible inks used in packaging.

2. Applications

- **Coatings:** Industrial & decorative paints, automotive coatings, protective coatings
- **Inks:** Flexographic, gravure, and offset printing inks
- **Adhesives:** Water-based.
- **Industrial Primers and Binder Systems**

3. Physical and Chemical Properties

Property	Specification
Appearance	Clear to slightly hazy liquid
Solubility in Water	Soluble in water
Color	Light yellow
pH (1% Solution)	11-14
VOC Content	Low-VOC
Active Content (%)	70%

4. Key Benefits

1. PH Buffering Stability

Nova DA101 act as effective pH buffers. This helps prevent formulation instability caused by pH fluctuations, especially under high humidity and tropical storage conditions.

2. Strong Dispersion Control

With its balanced surfactant system, Nova DA101 enhances pigment wetting and dispersion, resulting in uniform pigment distribution, improved gloss levels, and stronger color development. This contributes to better hiding power and reduces the need for multiple coats—ideal for economic and fast-drying paint systems.

3. Low Foaming Technology

Nova DA101 is designed as a low-foaming additive, making it well-suited for spray and roller applications. This minimizes surface defects, improves wet edge, and enhances application speed—vital for both professional painters and automated OEM coating lines.

4. Ammonia-Free, Low-Odor Performance

Unlike traditional pH stabilizers, Nova DA101 eliminates the need for added ammonia, reducing the strong, sharp odor commonly associated with water-based paints. This makes it safer and more pleasant for indoor use, especially in residential, commercial, or hospital environments, and aligns with stricter OEM indoor air quality standards.

5. Built-In Anti-Corrosion Support

Nova DA101 contributes to in-can corrosion resistance, particularly in formulations that include reactive pigments like TiO₂ and ZnO. This extends shelf life, protects the packaging, and reduces product loss during storage and distribution.

6. VOC-Moderate Formulation

Nova DA101 is formulated with a balance between performance and environmental responsibility. It meets moderate-VOC thresholds and supports green chemistry compliance under ASEAN and Indonesian eco-label programs—important for future regulatory alignment.

5. Usage Guidelines

- Recommended Dosage: 0.5 – 3.0% of the total formulation
 - Addition Sequence: Pre-mix with the binder or add directly into the grinding stage
 - Processing Temperature: Use between 10 – 50°C for optimal performance
-  **For best results**, conduct a preliminary test to determine the optimal dosage based on the specific formulation.

6. Storage and Handling

- Store in a **cool, dry place**, away from direct sunlight.
- Keep containers **tightly sealed** when not in use to prevent contamination.
- Use **appropriate personal protective equipment (PPE)** when handling.
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7. Packaging

- **50 kg drums**
- **200 kg barrels (non-returnable containers)**

For customized packaging options, please contact our sales team.

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