Document No.: H2A-TDS-H333-01
Revision: 00
Issue Date: 15/02/2026
Prepared by: Technical Department

TECHNICAL DATA SHEET

H 333

Nitrite-Based Corrosion Inhibitor for Closed Water Systems

1. PRODUCT DESCRIPTION

H 333 is a high-performance nitrite-based corrosion inhibitor formulated with an organic corrosion inhibitor package to provide effective protection for ferrous and non-ferrous metals in closed water systems.

It is specifically designed for:

• Closed chilled water systems
• Closed low-pressure hot water heating systems

The product contains a built-in pH indicator to assist in dosage control.

⚠ Not suitable for systems containing Aluminum.

2. MECHANISM OF ACTION

H 333 provides corrosion protection through anodic passivation of ferrous metals by forming a stable protective oxide film.

The organic inhibitor component enhances protection of copper and copper alloys.

3. APPLICATION & DOSAGE

Initial Dosing:
3 – 5 kg per m^3 of total system volume.

Target Residual:
600 – 1200 ppm Nitrite (as $NaNO_2$).

Recommended Operating pH:
8.5 – 10.5

Monitoring:
Nitrite concentration should be tested weekly using a standard nitrite test kit. Maintain a minimum residual of 700 ppm.

---

4. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Appearance: Red colored liquid
Odor: Mild
pH (as supplied): 9.0 – 10.5
Specific Gravity @ 25°C: 1.15 – 1.25
Solubility: Completely soluble in water
Flammability: Non-flammable
Volatility: Non-volatile

---

5. COMPATIBILITY

Compatible with:

- Mild Steel
- Carbon Steel
- Cast Iron
- Copper
- Brass

Not compatible with:

- Aluminum or aluminum-containing systems

---

6. PACKAGING

Available in:

25 kg HDPE drums

---

7. STORAGE & SHELF LIFE

Store in tightly closed original containers in a cool, dry, well-ventilated area away from direct sunlight.

Shelf Life: 24 months under recommended storage conditions.