

## PRODUCT DATA SHEET

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**PRODUCT NAME: RTW-221**

**TYPE: Catalyzed Sulphite**

For Rapid Oxygen Scavenging in Boiler Water

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### PRODUCT DESCRIPTION

RTW-221 is a catalyzed sodium sulphite powder designed for use in low and medium pressure boilers up to 850 PSI. It protects boiler internals by rapidly scavenging dissolved oxygen, preventing corrosion and extending boiler life.

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### APPLICATIONS

RTW-221 acts as an oxygen scavenger by chemically reacting with dissolved oxygen to form inert sodium sulphate. The catalyst accelerates this reaction, ensuring thorough and rapid oxygen removal. This results in minimized corrosion risks and prolonged equipment durability.

Additionally, RTW-221 is effective in removing free chlorine, with approximately 1.4 grams of RTW-221 neutralizing 1 gram of chlorine.

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### FEATURES AND BENEFITS

- Highly concentrated powder formulation
  - Rapidly protects boilers against oxygen-induced corrosion
  - Catalyzed for fast and efficient oxygen scavenging
  - Easily soluble in water
  - Effective at low temperatures
  - Supports mechanical deaeration processes
  - Simple, reliable control testing methods
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### DOSAGE AND ADMINISTRATION

- Recommended starting dose: **30 – 60 grams per ton** of boiler water, adjusted based on boiler pressure and oxygen levels.
  - Maintain sulfite residuals between **20 – 50 ppm**, varying with operating pressure and boiler design.
  - Typical dosing ratio: **8 ppm of RTW-221** per 1 ppm oxygen to be removed.
  - Preferred dosing location is the **boiler feed water line**.
  - Adjust dosage according to sulfite residual testing results (see dosing chart below).
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### MONITORING AND TESTING

- Regularly collect boiler water samples to monitor treatment levels, frequency depending on boiler type and pressure (daily or every few days).
- Test sulfite concentration to confirm adequate oxygen scavenging.
- Adjust dosage accordingly to maintain target sulfite levels for effective protection.

Boiler Pressure	PSI	Kg/cm <sup>2</sup>	Residual Sulfite (ppm as SO <sub>3</sub> )	Dosage Recommendation
Up to 450	Up to 32	20 – 50	Satisfactory	Maintain current dosage
450 – 850	32 – 60	10 – 20	Satisfactory	Maintain current dosage
Any	—	Below range	Increase dosage by 25%	Adjust dosing upward
Any	—	Above range	Decrease dosage by 25%	Adjust dosing downward

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### STORAGE & SAFETY

Store in a cool, dry place, avoid direct sunlight, avoid contact with skin, eyes, and clothing. Use appropriate personal protective equipment.

### PACKAGING

Polyethylene drums of 25 or 220 liters, containers of 1000 liters.