

## PRODUCT DATA SHEET

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**PRODUCT NAME: RTW-230**  
**TYPE: Alkalinity Builder**  
For Boiler Water Alkalinity Treatment

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### PRODUCT DESCRIPTION

RTW-230 is a high-strength alkaline and amine liquid treatment designed to maintain optimal pH conditions in boiler systems, ensuring effective corrosion and scale prevention. It plays a key role in Coordinated Treatment Program, working in synergy with hardness control additives to optimize boiler water chemistry.

### KEY BENEFITS

- Maintain ideal alkalinity levels in boiler water
- Neutralizes acidic gases to minimize corrosion
- Promotes the formation of a protective magnetite ( $\text{Fe}_3\text{O}_4$ ) film on metal surfaces
- Compatible with all boiler pressures
- FDA-approved for food-contact steam applications
- Helps prevent scale formation and ensures maximum system efficiency

### APPLICATION GUIDELINES

**RTW-230** is recommended for use in all types of boilers, particularly where consistent alkalinity is needed to support corrosion inhibition and scaling control.

### DOSAGE & CONTROL

The initial dosage range is **235–280 mL per ton** of boiler water, depending on operating pressure. Actual dosage should be adjusted based on **P-Alkalinity (as  $\text{CaCO}_3$ )** test results and the table provided below.

**Target pH:** 9.5 – 11.0

*(Follow boiler manufacturer's recommendations where different.)*

### DOSAGE GUIDE (mL per ton of water)

Boiler Pressure	P-Alkalinity (ppm $\text{CaCO}_3$ )	Dose (mL/ton)
0–30 Bar (0–441 psi)	0–60	225
	60–90	110
	90–100	70
	100–150	Satisfactory – No dose
	>150	Blowdown
	Target Range	100–150 ppm

<b>Boiler Pressure</b>	<b>P-Alkalinity (ppm CaCO<sub>3</sub>)</b>	<b>Dose (mL/ton)</b>
<b>31–40 Bar (456–588 psi)</b>	0–60	190
	60–90	80
	90–100	60
	100–150	Blowdown
	>150	Blowdown
	Target Range	100–130 ppm
<b>41–60 Bar (603–882 psi)</b>	0–60	170
	60–90	80
	90–100	60
	100–150	Blowdown
	>150	Blowdown
	Target Range	100–120 ppm

**Note:**

- **225 mL per ton** raises P-Alkalinity by **100 ppm**
- Always verify with regular alkalinity testing
- Adjust dose accordingly and perform blowdown if alkalinity exceeds target range

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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 250 liters.