Sheran Chemicals Trading CO LLC
Block No-G, Plot-180C, Al Hail Industrial Area, Fujairah, UAE
Phone: +971 9501 3271 | E-mail: info@Sheran.net
Contact Person: operations@sheran.net

Technical Data Sheet.

SC-BW-6044

POLYMER & PHOSPHATE BOILER WATER TREATMENT

T.D.S

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DESCRIPTION & USE

SC-BW-6044 is a concentrated liquid polymer and phosphate-based boiler water treatment specifically designed to prevent scale formation, control sludge accumulation, and maintain optimal operating efficiency in industrial steam-generating systems. This product offers an effective polymer and phosphate treatment program that addresses hardness contaminants, conditions suspended solids, and minimizes deposit formation on critical boiler and heat transfer surfaces.

SC-BW-6044 reacts with hardness minerals in boiler water, converting them into a soft, non-adherent form that can be easily removed through regular boiler blowdown procedures. By keeping hardness salts and suspended solids in a conditioned and dispersed state, the product helps prevent the development of hard, insulating scale deposits. This is crucial, as such deposits can reduce heat transfer efficiency, increase fuel consumption, and impair overall boiler performance.

The advanced treatment program also plays a vital role in controlling sludge accumulation, minimizing deposit buildup, and reducing the risk of under-deposit corrosion. By promoting cleaner boiler surfaces and improving heat transfer efficiency, SC-BW-6044 contributes to enhanced energy efficiency, reduced maintenance requirements, and extended equipment life.

Regular application of SC-BW-6044 helps maintain stable boiler water chemistry, improves operational reliability, and supports efficient boiler performance under varying feedwater and operating conditions. The product is particularly effective in systems where hardness leakage, fluctuating water quality, or elevated dissolved solids contribute to scale formation and fouling.

SC-BW-6044 is suitable for use in low and medium-pressure steam boilers, industrial hot water boilers, process heating systems, and other closed-loop water systems that require effective scale and sludge control. It forms an integral part of a complete boiler water treatment program designed to maximize system protection, enhance plant reliability, and reduce overall operating costs.

FEATURES & BENEFIT

Controls boiler scale formation; Conditions sludge deposits; Reduces boiler corrosion; Improves heat transfer efficiency; Reduces fuel consumption; Supports clean boiler operation; Extends equipment life; Easy liquid application

APPLICATION

- Industrial Steam Boilers
- Hot Water Boilers
- Process Heating Systems
- Utility Boilers
- Boiler Feedwater Treatment Programs
- Central Heating Systems

MODE OF ACTION

SC-BW-6044 provides an effective polymer and phosphate treatment program that conditions hardness salts and suspended solids before they can deposit on boiler surfaces.

The treatment:

- Prevents scale formation on heat transfer surfaces
- Conditions hardness salts into non-adherent sludge
- Maintains suspended particles in a dispersed state
- Reduces sludge accumulation
- Enhances blowdown efficiency
- Supports cleaner boiler operation
- Improves heat transfer efficiency
- Assists in reducing under-deposit corrosion

DOSAGE

Typical dosage range: 20 - 100 ppm based on system requirements.
Actual dosage depends upon:

- Feedwater quality
- Boiler pressure
- Hardness levels
- Condensate return percentage
- Cycles of concentration
- Operating conditions
- Treatment objectives

Dosage should be adjusted based on routine water analysis and operating conditions.

TARGET CONTROL LIMITS & TEST METHODS

Parameter	Recommended Limit	Test Method
Boiler Water pH	10.5 - 11.5	pH Meter
Phosphate Residual	20 - 50 ppm	Phosphate Test Kit
P-Alkalinity	As Program Requirement	Alkalinity Test Kit
M-Alkalinity	As Program Requirement	Alkalinity Test Kit
Conductivity	As System Requirement	Conductivity Meter
Total Hardness	Nil Detectable Preferred	Hardness Test Kit
Iron (Fe)	< 1 ppm Preferred	Iron Test Kit
Condensate pH	8.3 - 9.2	pH Meter
TDS	As Boiler Design Requirement	TDS / Conductivity Meter

APPLICATION METHOD

Dose continuously into the:

- Boiler Feedwater Tank
- Deaerator
- Chemical Dosing Tank
- Feedwater Injection Point

Use a suitable metering pump and ensure adequate mixing throughout the system for optimum treatment performance

MATERIAL COMPATIBILITY

SC-BW-6044 is compatible with:

- Carbon Steel
- Stainless Steel
- Copper Alloys
- Common Boiler System Materials

when used in accordance with recommended treatment guidelines.

TYPICAL PROPERTIES

Property	Specification
Appearance	Clear Amber Liquid
Odor	Mild Characteristic Odor
pH (Neat)	11.0 - 12.0
Specific Gravity @ 25°C	1.15 - 1.22
Solubility in Water	Completely Soluble
Flash Point	None

STORAGE, SHELF LIFE & PACKING

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

Shelf Life: 24 Months when stored under recommended conditions.

Packing:

- 25 Ltr Drum
- 200 Ltr Drum
- 1000 Ltr Returnable IBC

IMPORTANT NOTE

The information provided is for industrial and professional users. Users should verify the suitability of products under actual operating conditions and adhere to all relevant regulations, equipment manufacturer recommendations, and industry best practices. The information in this document is intended for industrial and professional users. Users need to assess the suitability of any products under real-world operating conditions specific to their applications. Additionally, users must comply with all relevant regulations, follow equipment manufacturers' recommendations, and adhere to established industry best practices to ensure safe and effective use. Always consider environmental conditions, application requirements, and potential risks when selecting products.