



VpCI™ ADDITIVES FOR FORMULATORS

S-7

PRODUCT DESCRIPTION

S-7 is a catalyzed sodium sulfite based oxygen scavenger designed to protect low to medium pressure boiler systems against corrosion. Oxygen present in feed water can cause severe damage to boiler equipment if left unchecked. An oxygen induced attack can lead to pitting corrosion on the metal surface, which can result in rapid failure of the boiler. Ten parts of S-7 is necessary to remove one part oxygen. It is not recommended to use S-7 in high pressure boilers.

$$(10 \times \text{Dissolved Oxygen}) + \frac{\text{Residual} \times 1.6}{\text{Feed Water Cycles}} = \text{ppm Sodium Sulfite Required}$$

FEATURES

- Economical
- Safe to use
- Easy control
- Effective against dissolved oxygen
- Compatible with other Cortec additives such as M-645
- Compatible with Cortec's corrosion inhibitors for boilers, such as VpCI-615 and VpCI-617

TYPICAL PROPERTIES

Color	Off-white to tan
Physical Form	Granular powder
pH	9.5-10.5 (1% aqueous)
Specific gravity	2.63 @ 68F (20C)
Solubility in water	17%
Shelf Life	up to 2 years (properly sealed container)

DOSAGE

The dosage will vary depending on the amount of dissolved oxygen in the boiler water. A starting dosage of S-7 is 100 ppm. S-7 should continue to be added until desired dissolved oxygen level is reached in the boiler water.

APPLICATION

Maximum and minimum limits are specified for control of boiler water sodium sulfite concentrations. Do not hesitate to increase or decrease the feed of this chemical, as necessary, in order to keep boiler water sulfite concentrations between the specified limits. Minimum residual levels of sodium sulfite should be between 30-60 ppm, when the boiler is operating below 150 psi. The recommended limits for sodium sulfite control are:

Boiler Pressure	Sodium Sulfite Residual
0-150 psi	30-60 ppm
150-300 psi	20-40 ppm
300-600 psi	20-30 ppm
600-900 psi	10-15 ppm
900-1200 psi	5-10 ppm
1500 psi	Sodium Sulfite Not Recommended

Test kits can be purchased from companies such as the HACH Company to monitor the level of dissolved oxygen.

FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
KEEP CONTAINER TIGHTLY CLOSED
NOT FOR INTERNAL CONSUMPTION
CONSULT MATERIAL SAFETY DATA SHEET FOR MORE INFORMATION

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