Boiler Catalyzed Oxygen Scavenger

Description

Boiler oxygen scavengers are of various types depending upon the type and capacity of boiler. These are based on catalyzed sodium sulfite, catalyzed potassium sulfite, catalyzed sodium-bisulfite, catalyzed hydrazine hydrate, carbonyldrazide etc.

There is a suitable catalyst added to the formulation to enables quick and instant removal of oxygen from the feed water. The products remove oxygen and also passivates the system metal to prevent corrosion.

Catalyzed products have much higher efficiency of removing dissolved oxygen from water and at lesser time duration, than basic chemical.

Chemtex’s Oxygen Scavenger surpasses the performance of other oxygen scavengers such as Elimin-ox, Nalco 1700, Nalco 1710, Nalco 1720, Nalco 1721, Nalco 1722, Maxtreat 3100, Maxtreat 3100L, Maxtreat 3200, Maxtreat 3220S, Indion 166, etc. The traditional definition of Metal passivation is considered to be the reduction of hematite to magnetite in iron-based boiler tubes. While it is actually a process by which bare metal surfaces forms a protective oxide film. The passive film is very thin & dense. It is also distinguishable from the base metal by the coloration. In case of carbon steel, this protective film is of magnetite (Fe₃O₄) and is black in colour.

Application

Boilers

<table>
<thead>
<tr>
<th>Specification</th>
<th>Chemical Type</th>
<th>Catalysted blend of Oxygen Scavenger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid / Powder</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Product Specific</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>9.0 ± 1.0</td>
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</tbody>
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### Solubility

<table>
<thead>
<tr>
<th>Solubility</th>
<th>Completely Soluble in all proportions of Water</th>
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### Dosage

The chemical is dosed gently in a separate tank and is dissolved with the feed water. The solution should be dosed continuously before the deaerator. The amount of chemical required depends on the amount of dissolved oxygen in feed water and temperature of feed water and plant operating conditions. The specific dosage rates will be specified by the CSL technical representative.

### Major Benefits

- Instant removal of dissolved oxygen from the feed water line
- Prevents oxidation corrosion in boiler
- No poisoning of catalyst beds
- Can be used at various boiler pressure
- Passivates the metal surface
- Adds minimum TDS to the water