

BIBC 600

Boiler Oxygen Scavenger



PRODUCT BENEFITS

BIBC 600 is a traditional liquid sulfite catalysed product. It is a non-volatile, inorganic oxygen scavenger, which can be used in systems operating at pressures up to 65 barg. BIBC 600 begins to break down at pressures of 43 barg and is completely decomposed at pressures above 65 barg. BIBC 600 prevents corrosion in boiler and other water systems by reacting with any dissolved oxygen in the water. Because of the catalyst contained in BIBC 600 the rate of reaction with oxygen is greatly increased, so that the oxygen is removed before it can begin to corrode metal surfaces. BIBC 600 may also be used for the removal of chlorine.

PRODUCT CHARACTERISTICS

Refer to the Material Safety Data Sheet for the most current data.

Form:	Liquid
Colour:	Pink
Odour:	Pungent
Specific Gravity:	1.315 – 1.350
Solubility in Water:	Complete
pH (neat, 20°C):	3.9 – 4.9
Freezing point:	<0 °C

HANDLING & DELIVERY

Read the Material Safety Data Sheet before using this product.

BIBC 600 has a maximum recommended in-plant storage life of one year in factory sealed containers. Keep container closed when not in use. The maximum storage temperature is 49°C. All storage and feeding equipment should be built of compatible materials.

APPLICATION & DOSAGE

- BIBC 600 must be fed neat.
- BIBC 600 must be fed continuously to the storage section of the deaerator below the water line via a stainless steel quill.
- BIBC 600 cannot be fed prior to the attemperation water take-off point.
- BIBC 600 cannot be mixed with other chemicals either neat or in diluted form.
- BIBC 600 is compatible with most BIB Cochran internal boiler treatment programmes.
- Dosages are based on 17.5 ppm of product per ppm oxygen, plus a residual of product in the feedwater based on ASME guidelines (3.3 ppm of BIBC 600 is required per ppm of sulfite residual).

PACKAGING

BIB Cochran products are available in a wide selection of packaging options, to best suit your required need. These may include small drums (25kg), drums (225kg), and plastic IBC's (1220kg).

For other packaging options, please contact your local BIB Cochran team.

BIB COCHRAN LIMITED

Newbie Works, Annan, Dumfries & Galloway, UK, DG12 5QU
Tel: +44 (0)1461 202111 Fax: +44 (0)1461 205511
Email: enquiries@bibcochran.com www.bibcochran.com

BIBC 604

Internal Boiler Treatment Multifunctional



PRODUCT BENEFITS

BIBC 604 is a multifunctional boiler water treatment for boilers operated on softened water (M alkalinity = 200 – 400 ppm as CaCO₃). The programme is based on the technology of residual phosphate control with dispersants. It is designed to scavenge the feedwater oxygen, prevent the formation of scale, and recreates a non-corrosive environment in the boiler and preboiler systems. BIBC 604 is designed for use in boiler systems without deaerators; maximum operating pressure will be 30 barg and maximum superheated steam temperature 250°C (482°F).

PRODUCT CHARACTERISTICS

Refer to the Material Safety Data Sheet for the most current data.

Form:	Liquid
Colour:	Brown - Red
Boiling Point:	>100°C
Relative Density:	1.12 – 1.16 (20°C)
Solubility in Water:	Complete
pH:	5 - 6
Freezing point:	-5°C

APPLICATION & DOSAGE

- BIBC 604 must be fed continuously into the feed-water line upstream of the boiler feedwater pump via a stainless steel injection quill.
- Feed BIBC 604 neat, however if diluted is required, use cooled condensate demineralised make-up.
- Do not add other chemicals to neat or diluted product.
- Dosage may be in the range of 15-50ppm in the feedwater based on system parameters.

HANDLING & DELIVERY

Read the Material Safety Data Sheet before using this product.

BIBC 604 has a suggested storage temperature range of 5°C to 35°C. The suggested in-plant storage limit for BIBC604 is six months.

PACKAGING

BIB Cochran products are available in a wide selection of packaging options, to best suit your required need. These may include small drums (25kg), drums (225kg), and plastic IBC's (1150kg).

For other packaging options, please contact your local BIB Cochran team.

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BIBC 608

Internal Boiler Treatment Multifunctional



PRODUCT BENEFITS

BIBC 608 is a multifunctional boiler water treatment for boilers operated on softened water (M alkalinity = 200 – 400 ppm as CaCO₃). The programme is based on the technology of residual phosphate control with dispersants. It is designed to scavenge the feedwater oxygen, prevent the formation of scale, and recreates a non-corrosive environment in the boiler and preboiler systems. BIBC 608 is designed for use in boiler systems without deaerators; maximum operating pressure will be 30 barg and maximum superheated steam temperature 250°C (482°F).

PRODUCT CHARACTERISTICS

Refer to the Material Safety Data Sheet for the most current data.

Form:	Liquid
Colour:	Brown - Red
Boiling Point:	>100°C
Relative Density:	1.12 – 1.16 (20°C)
Solubility in Water:	Complete
pH:	5 - 6
Freezing point:	-5°C

APPLICATION & DOSAGE

- BIBC 608 must be fed continuously into the feed-water line upstream of the boiler feedwater pump via a stainless steel injection quill.
- Feed BIBC 608 neat, however if diluted is required, use cooled condensate demineralised make-up.
- Do not add other chemicals to neat or diluted product.
- Dosage may be in the range of 15-50ppm in the feedwater based on system parameters.

HANDLING & DELIVERY

Read the Material Safety Data Sheet before using this product.

BIBC 608 has a suggested storage temperature range of 5°C to 35°C. The suggested in-plant storage limit for BIBC608 is six months.

PACKAGING

BIB Cochran products are available in a wide selection of packaging options, to best suit your required need. These may include small drums (25kg), drums (250kg), and plastic IBC's (1150g).

For other packaging options, please contact your local BIB Cochran team.

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BIBC 616

Internal Boiler Treatment



PRODUCT BENEFITS

BIBC 616 is a traditional tannin based, organic oxygen scavenger which can be used in systems operating at pressures up to 20 barg. BIBC 616 provides some protection against oxygen corrosion in the boiler feedwater system and the boiler, even when not all oxygen has been scavenged, by the formation of a protective film on the metal surfaces. BIBC 616 begins to break down at pressures of 20 barg. BIBC 616 provides both corrosion protection and scale inhibition by scavenging oxygen forming a protective film and disrupting crystal growth.

PRODUCT CHARACTERISTICS

Refer to the Material Safety Data Sheet for the most current data.

Form:	Liquid
Colour:	Brown
Boiling Point:	>100°C
Relative Density:	1.10 (20°C)
Solubility in Water:	Complete
pH:	4.7

HANDLING & DELIVERY

Read the Material Safety Data Sheet before using this product.

BIBC 616 has a maximum recommended in-plant storage life of two years in factory sealed containers. Keep container closed when not in use. BIBC 616 is compatible with stainless steel (304, 316), polyethylene, and polypropylene.

Contain any spills onto sand or other inert material for disposal. Do not discharge into water-courses without pre-treatment. Dispose of in accordance with local authority regulations.

APPLICATION & DOSAGE

- BIBC 616 preferably diluted with warm condensate or similar good quality. A dilution to 5% is recommended.
- Feed BIBC 616 continuously. Interruption in feed will result in corrosion in feedwater system and possible tube failure in the boiler.
- Feed BIBC 616 to the storage section of the deaerator below the water line via a stainless steel injector.
- BIBC 616 cannot be fed prior to the attemptation water take-off point.
- Total BIBC 616 dosage is based the tannin content of the product. The British Standard for boiler water treatment BS2486 requires 120 to 160 ppm in the boiler water. The residual range for BIBC 616 should be controlled based on the cycles of concentration.

PACKAGING

BIB Cochran products are available in a wide selection of packaging options, to best suit your required need. These may include small drums (25kg), drums (225kg), and plastic IBC's (1050kg).

For other packaging options, please contact your local BIB Cochran team.

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BIBC 624

Internal Boiler Treatment



PRODUCT BENEFITS

BIBC 624 is a liquid boiler feedwater treatment that contains a blend of synthetic organic polymers. This treatment programme is used for maximum scale inhibition and internal metal passivation. It is designed for use in softened make-up systems. The product is formulated to significantly reduce ammonia contribution to improve condensate system corrosion control. Suggested maximum use pressure is 1000psi.

PRODUCT CHARACTERISTICS

Refer to the Material Safety Data Sheet for the most current data.

Physical State:	Liquid
Odour:	Ammoniacal
Specific Gravity:	1.19 – 1.23 @ 15°C
Solubility in Water:	Complete
pH (100%):	9.0 – 10.0
Viscosity:	58 cps @ 15°C
Freezing Point:	-5°C
Boiling Point:	93°C
Vapour Pressure:	11.5 mm Hg @ 20°C

HANDLING & DELIVERY

Read the Material Safety Data Sheet before using this product.

BIBC 624 has a suggested storage temperature range of 50°C -120°C. The in-plant storage time limit is one year.

APPLICATION & DOSAGE

- BIBC 624 must be fed neat.
- BIBC 624 must be fed continuously into the feedwater line via a stainless steel quill.
- Copper and copper alloys are not compatible with neat BIBC 624.
- BIB 624 cannot be mixed with other chemicals either neat or in diluted form.
- The programme must be supplemented with feed of an oxygen scavenger.
- A minimum boiler water hydroxide alkalinity level of 50 ppm (as CaCO₃) should be maintained.
- Typical dosages may be from 30-100 ppm in the feed water

PACKAGING

BIB Cochran products are available in a wide selection of packaging options, to best suit your required need. These may include small drums (25kg), drums (225kg), and plastic IBC's (1110kg).

For other packaging options, please contact your local BIB Cochran team.

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BIBC 632

Condensate Corrosion Inhibitor



PRODUCT BENEFITS

BIBC 628 is a liquid boiler feedwater treatment that contains a polyphosphate and synthetic organic polymer. This programme is used to provide maximum scale deposit control, and internal metal passivation. It is specifically designed as a residual phosphate or phosphate-pH control programme for demineralised boiler systems. The product is formulated to essentially eliminate product ammonia contribution to improve condensate system corrosion control. The suggested maximum use drum pressure is 1800 psig.

PRODUCT CHARACTERISTICS

Refer to the Material Safety Data Sheet for the most current data.

Physical State:	Liquid
Appearance:	Clear, light yellow liquid
Specific Gravity:	1.07 – 1.11 @ 25°C
pH (Neat):	12.9 to 13.3
Viscosity:	4 cps @ 25°C
Freezing Point:	-4°C
Freeze-thaw recov.:	None
Flash Point (PMCC):	None Detected

HANDLING & DELIVERY

Read the Material Safety Data Sheet before using this product.

BIBC 628 has a suggested in-plant storage limit of six months. Bulk tanks should be constructed of polyethylene or stainless steel. BIBC628 should not be permitted to freeze. The suggested minimum storage temperature is 120°F.

APPLICATION & DOSAGE

- BIBC 628 must be fed neat.
- BIBC 628 must be fed continuously into the feedwater line via a stainless steel quill.
- Copper and copper alloys are not compatible with neat BIBC 628.
- BIBC 628 cannot be mixed with other chemicals either neat or in diluted form.
- The programme must be supplemented with feed of an oxygen scavenger.
- Dissolved oxygen in the feedwater, at the point of chemical injection, must be zero.
- Typical dosages may be from 5-100 ppm in the feed water

PACKAGING

BIB Cochran products are available in a wide selection of packaging options, to best suit your required need. These may include small drums (25kg), drums (210kg), and plastic IBC's (1000kg).

For other packaging options, please contact your local BIB Cochran team.

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BIBC 632

Condensate Corrosion Inhibitor



PRODUCT BENEFITS

BIBC 632 corrosion inhibitor designed for use in steam and condensate systems. It may be used at steam pressures up to 170 barg and temperatures up to 593°C. BIBC 632 provides effective neutralisation of acidic gases, such as CO₂, and other acidic components, in the extended areas of a condensate system. It effectively reduces condensate maintenance costs, and minimises the potential for boiler tube failures, caused by metal corrosion product deposits (like iron or copper) in the return condensate. BIBC 632 is especially effective in complex industrial systems where steam pressures may become quite low before final condensation is achieved. Proper application of BIBC 632 keeps the pH of the condensate in the non-corrosive, alkaline range.

PRODUCT CHARACTERISTICS

Refer to the Material Safety Data Sheet for the most current data.

Physical State:	Liquid
Colour:	Clear, straw
Odour:	Amine
Flash Point:	60°C
Relative Density:	0.95-0.97 (25°C)
Solubility in Water:	Complete
pH:	12.1

HANDLING & DELIVERY

Read the Material Safety Data Sheet before using this product.

BIBC 632 has a suggested storage temperature limit of 49°C. The in-plant storage limit is two years.

APPLICATION & DOSAGE

- BIBC 632 can be fed neat or diluted (with demineralised water or cooled condensate).
- The preferred feedpoint is the main steam header, but product can be fed directly to the boiler or into the feedwater line. Feeding should be via a stainless steel injector. Do not feed BIBC 632 ahead of the deaerator.
- BIBC 632 must be fed on a continuous basis and must not be combined with filming amines, or catalysed oxygen scavengers.
- The start-up dosage factor for BIBC 632 for CO₂ is 1.2 ppm per ppm of CO₂ and needs and needs to be optimised via condensate pH measurements (kept between 8.8 – 9.6).

PACKAGING

BIB Cochran products are available in a wide selection of packaging options, to best suit your required need. These may include small drums (20kg), drums (200kg), and plastic IBC's (960kg).

For other packaging options, please contact your local BIB Cochran team.

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