

Industrial Water Treatment

Protect your Investment



 **BASF**

The Chemical Company

Industrial Water Treatment: Protect your Investment

BASF is dedicated to ensuring that all plants and processes that utilize water are able to operate at peak efficiency.

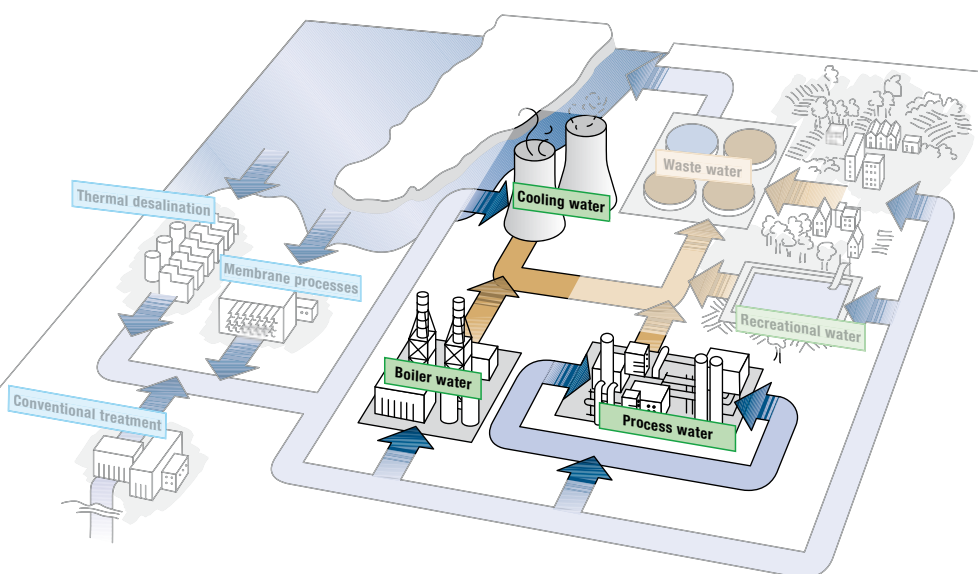
Our customers are looking for proven solutions to fight effectively the problems of scale, deposit of solids, corrosion, bio-fouling, foam formation and impurities in water. We provide most advanced chemical solutions and services to formulators and service companies making us the preferred partner for various industries involved in water treatment that range from water production through water use to water purification.

Together with our customers' in-depth formulation knowledge, our products deliver cost savings resulting in:

- ▶ Immediate reduction in maintenance
- ▶ Highly maximised facility running times
- ▶ Major energy savings

... and thus more efficient operations.

With our cutting edge expertise in water treatment chemicals we as "The Chemical Company" provide a valuable contribution to your businesses. On top of the wide product range we share expert advice on how to formulate your products, we assist in registration affairs and legal advice – and offer much more benefits. Worldwide.



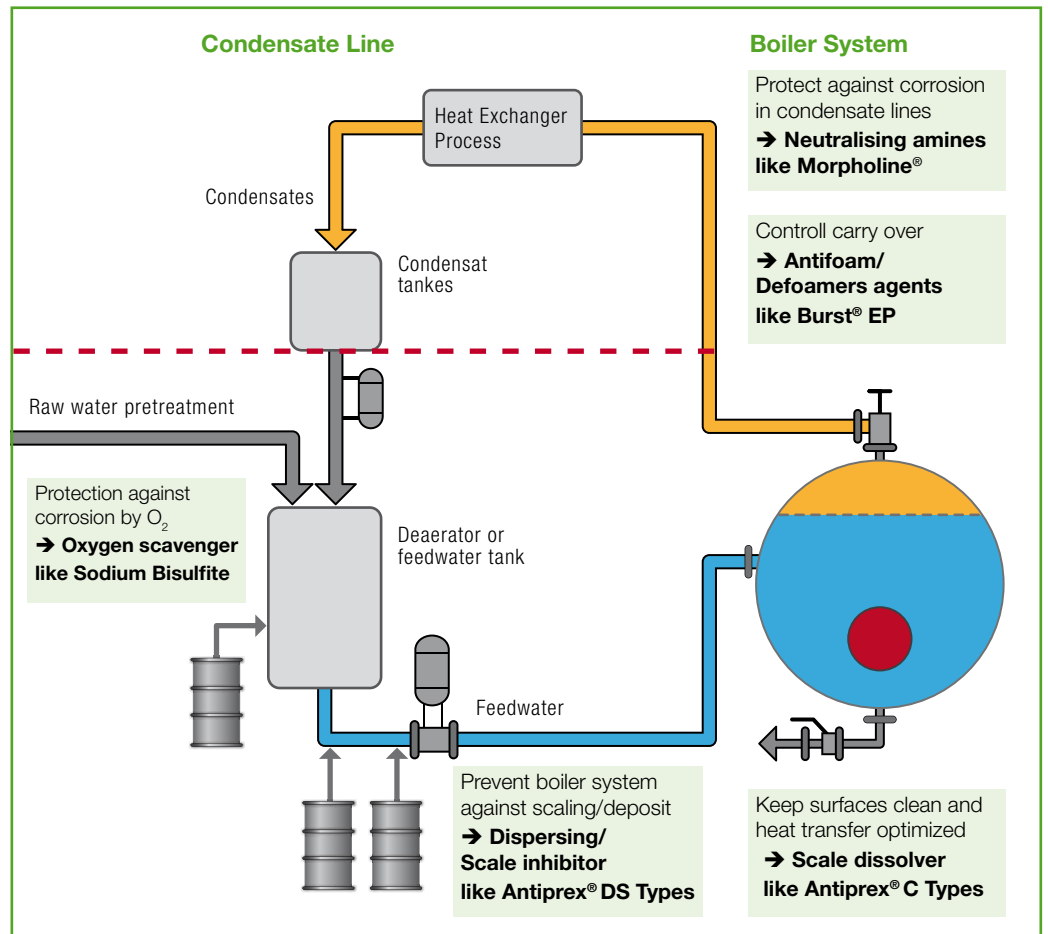
Protect your Investment

Boiler System Water Treatment

- Reduced risk of tube failure
- Improved steam quality and system reliability
- Reduced energy costs

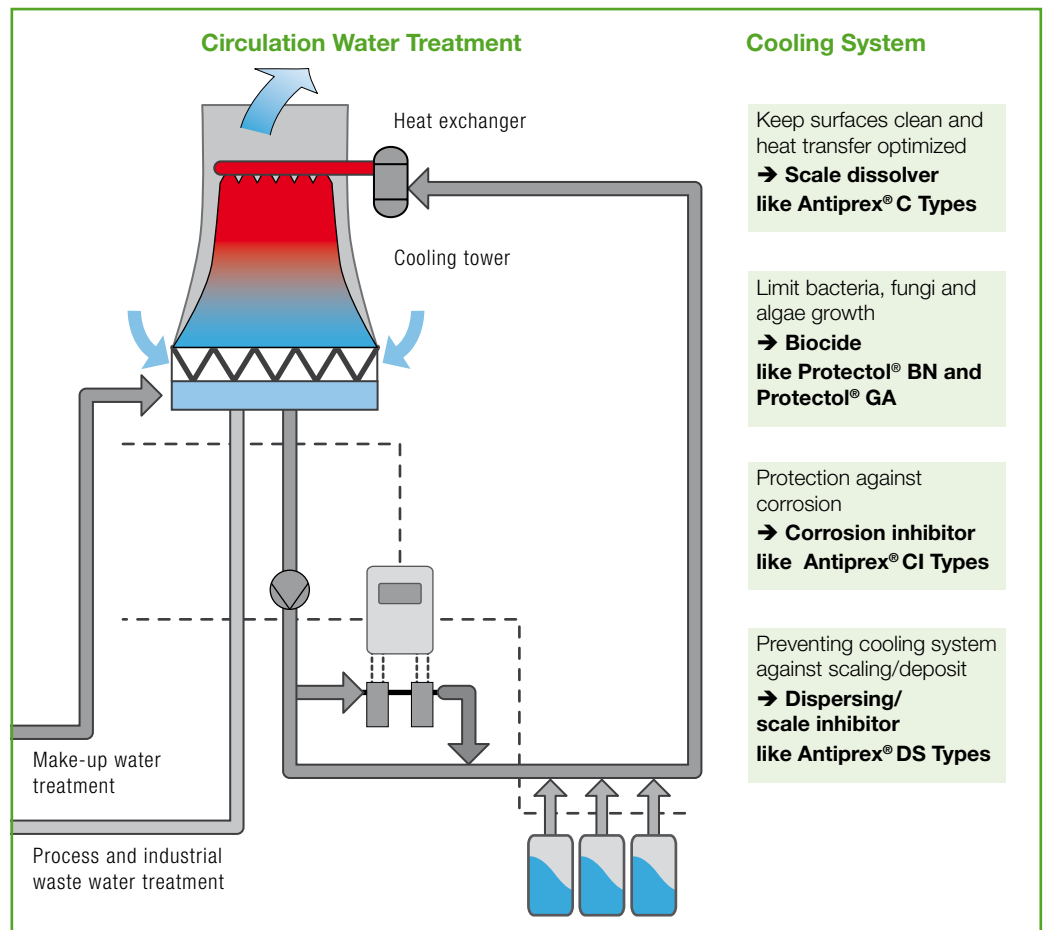
Process Water Treatment

- Improved pre-treatment of feedwater
- Optimized clarification of plant effluent
- Improved system reliability
- Reduced energy costs



Cooling System Water Treatment

- Energy savings through improved thermal efficiency
- Water savings by reducing blowdown and operating at higher cycles of concentration
- Maximize life expectancy of critical assets
- Reduce regulatory costs by improving environmental profile of treated water being discharged
- Reduce maintenance costs



BASF Portfolio for Industrial Water Treatment

Product Type	Product Name	Membrane Processes	Cooling Water	Boiler Water	Process Water	Chemistry	Functionality
Amines	3-Methoxypropylamine			💧		3-Methoxypropylamine	Neutralising amine
	Cyclohexylamine			💧		Cyclohexylamine	Neutralising amine
	Diethylethanolamine			💧		Diethylethanolamine (DEAE)	Neutralising amine
	Ethylenediamine				💧	Ethylenediamine	Neutralising amine
	Isopropanolamine				💧	Isopropanolamine	Neutralising amine
	Morpholine			💧		Morpholine	Neutralising amine
	N,N-Dimethyl-ethanolamine				💧	N,N-Dimethylethanolamine	Neutralising amine
	N,N-Dimethyl-isopropanolamine			💧		N,N-Dimethylisopropanol-amine (DMA-2-P)	Neutralising amine
Biocides	Protectol® BN		💧		💧	Bronopol	Biocide
	Protectol® DZ P				💧	Dazomet	Biocide
	Protectol® GA 50		💧		💧	Glutaraldehyd	Biocide
	Protectol® GL				💧	Glyoxal	Biocide
	Protectol® HT				💧	Hexahydrotriazine	Biocide
Chelating agents	Antiprex® CD			💧	💧	Diethylenetriaminepentaacetic acid, pentasodium salt	Scale dissolver (sequestering agent)
	Antiprex® CD 50%			💧	💧	Diethylenetriaminepentaacetic acid, pentasodium salt	Scale dissolver (sequestering agent)
	Antiprex® CE	💧		💧	💧	Ethylenediaminetetraacetic acid, tetrasodium salt, 40% solution	Scale dissolver (sequestering agent)
	Antiprex® CE Powder	💧		💧	💧	Ethylenediaminetetraacetic acid, tetrasodium salt	Scale dissolver (sequestering agent)
	Antiprex® CEA			💧	💧	Ethylenediaminetetraacetic acid, diammonium salt	Scale dissolver (sequestering agent)
	Antiprex® CES Powder			💧	💧	Ethylenediaminetetraacetic acid	Scale dissolver (sequestering agent)
	Antiprex® CEX			💧	💧	Ethylenediaminetetraacetic acid, 40% solution	Scale dissolver (sequestering agent)
	Antiprex® CEX Powder			💧	💧	Ethylenediaminetetraacetic acid, powder	Scale dissolver (sequestering agent)
	Antiprex CM	💧		💧	💧	Methylglycinediacetic acid, trisodium salt	Scale dissolver (sequestering agent)
	Antiprex CN			💧	💧	Nitrilotriacetic acid, trisodium salt, 40% solution	Scale dissolver (sequestering agent)
	Antiprex® CN-R			💧	💧	Nitrilotriacetic acid, trisodium salt	Scale dissolver (sequestering agent)

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Inorganics	Sodium Bisulfite Solution	💧		💧		Sodium Bisulfite Solution	Oxygen scavenger/ Dechlorination
	Sodium Nitrite				💧	Sodium Nitrite	Corrosion inhibitor
Misc. organic compounds	Antiprex® CI 100 BD		💧	💧	💧	2-Butyne-1,4-diol	Corrosion inhibitor
	Antiprex® MSA	💧	💧	💧	💧	Methanesulfonic acid	Scale dissolver (acidic agent)
	Antiprex® DCS		💧		💧	Mixture of dicarboxylic acids	Scale dissolver (acidic agent)
Polymers	Antiprex® N 45				💧	Naphthalene sulphonic acid condensation product, sodium salt	Dispersant
	Antiprex® N 91				💧	Naphthalene sulphonic acid condensation product, sodium salt	Dispersant
	Antiprex® AD 1020 P		💧		💧	Polyacrylic acid, sodium salt	Scale inhibitor/ Dispersant
	Antiprex® AD 1020 XP		💧		💧	Polyacrylic acid, sodium salt	Scale inhibitor/ Dispersant
	Antiprex® AD 1025 CP		💧		💧	Polyacrylic acid, sodium salt	Scale inhibitor/ Dispersant
	Antiprex® AD 2020 S		💧	💧	💧	Polyacrylic acid	Scale inhibitor/ Dispersant
	Antiprex® AD 2060				💧	Polyacrylic acid, sodium salt	Dispersant
	Sokalan® RO 100	💧				Polycarboxylate	Scale inhibitor/ Dispersant
	Sokalan® RO 400	💧				Polycarboxylate	Scale inhibitor/ Dispersant
	Sokalan® RO 1000	💧				Polycarboxylate	Scale inhibitor/ Dispersant
	Sokalan® RO 3000	💧				Polycarboxylate	Scale inhibitor/ Dispersant
	Zetag® IP 20		💧		💧	Polyethylenimine	Biodispersing agent
	Zetag® IP 250				💧	Polyethylenimine	Coagulant
	Zetag® IP 2M				💧	Polyethylenimine, modified	Coagulant/Deoiler
	Zetag® IP 61 SC				💧	Polyethylenimine, modified	Emulsifier, cationic
	Zetag® IP 8		💧		💧	Polyethylenimine	Biodispersing agent
Zetag® R-IP 20		💧		💧	Polyethylenimine	Biodispersing agent	

BASF Portfolio for Industrial Water Treatment

Product Type	Product Name	Membrane Processes	Cooling Water	Boiler Water	Process Water	Chemistry	Functionality
Surfactants	Burst® A-OB				💧	Sodium dioctylsulphosuccinate, dissolved in amixture of water and neopentyl glycol, sodium salt (60%)	Cleaning agent/ Wetting agent
	Burst® A-PE				💧	Sodium dioctylsulphosuccinate, dissolved in amixture of water and neopentyl glycol, sodium salt (60%)	Cleaning agent/ Wetting agent
	Burst® EP 3100				💧	PO/EO Block Copolymer	Cleaning agent/ Wetting agent
	Burst® EP 4300				💧	PO/EO Block Copolymer	Cleaning agent/ Wetting agent
	Burst® EP 6100		💧	💧	💧	PO/EO Block Copolymer	Defoamer/ Dispersant
	Burst® EP 6200		💧	💧	💧	PO/EO Block Copolymer	Emulsifier/ Cleaning agent/ Wetting agent
	Burst® EP 8100		💧	💧	💧	PO/EO Block Copolymer	Defoamer/ Dispersant
	Burst® LE				💧	Castor oil ethoxylates	Emulsifier
	Burst® LX 50				💧	C ₁₀ Guerbet alcohol + 5 EO	Cleaning agent/ Wetting agent
	Burst® LX 80				💧	C ₁₀ Guerbet alcohol + 8 EO	Cleaning agent/ Wetting agent
	Burst® NA 300				💧	Anionic/nonionic surfactant combination based on fatty alcohol ethoxylate	Cleaning agent/ Wetting agent
	Burst® NA 450				💧	Mixture of nonionic surfactant and alkylcarboxylic acids	Cleaning agent/ Wetting agent
	Burst® NO 60				💧	C ₁₀ Oxo alcohol + 6 EO	Cleaning agent/ Wetting agent
	Burst® NO 70				💧	C ₁₀ Oxo alcohol + 7 EO	Cleaning agent/ Wetting agent
	Burst® OA 70				💧	C ₁₃ C ₁₅ Oxo alcohol + 7 EO	Cleaning agent/ Wetting agent
	Burst® OA 110				💧	C ₁₃ C ₁₅ Oxo alcohol + 11 EO	Cleaning agent/ Wetting agent
	Burst® OT 30				💧	C ₁₃ Oxo alcohol + 3 EO	Cleaning agent/ Wetting agent
	Burst® OT 50				💧	C ₁₃ Oxo alcohol + 5 EO	Cleaning agent/ Wetting agent

Product Type	Product Name	Membrane Processes	Cooling Water	Boiler Water	Process Water	Chemistry	Functionality
Surfactants	Burst® OT 790				💧	C ₁₃ Oxo alcohol + 7 EO	Cleaning agent/ Wetting agent
	Burst® OT 890				💧	C ₁₃ Oxo alcohol + 8 EO	Cleaning agent/ Wetting agent
	Burst® P 400				💧	Polypropylene Glycol	Defoamer
	Burst® PA 90				💧	Alkylphenoethoxylate + 9 EO	Cleaning agent/ Wetting agent
	Burst® PF 13 T				💧	Fatty Alcohol Alkoxyate	Defoamer
	Burst® PF 4010				💧	Fatty Alcohol Alkoxyate	Defoamer/ Wetting agent
	Burst® PF 6000				💧	Fatty Alcohol Alkoxyate	Cleaning agent/ Wetting agent
	Burst® PG 200 Types				💧	Polyethylene Glycol	Solubilizer/ Dispersant
	Burst® PX 70				💧	C ₁₀ Guerbet alcohol + 7 EO	Cleaning agent/ Wetting agent



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Safety

We know of no ill effects that could have resulted from using our products for the purpose for which they are intended and from processing them in accordance with current practice. According to the experience we have gained up to now and other information at our disposal, our products do not exert any harmful effects on health, provided that they are used properly, due attention is given to the precautions necessary for handling chemicals, and the information and advice given in our safety data sheet are observed.

Labeling

Details about the classification and labeling of our products and further advice on safe handling are contained in the current safety data sheets.

Note

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