# BIMAKS®

"Sustainable Saving Solutions"





#### **ABOUT US**

BIMAKS is a leading company in providing high performance chemicals, process aids and test dosage equipment for the water treatment industry.

We aim to provide our customers the most updated products, reliable technical service and efficient logistical support through our technical research and business development activities.

Embodying production and marketing functions in its structure. BIMAKS is found by an expert in the business with his innovative development know-how and environment sensitive recipes, has created itself a name as a customer oriented service company.

Team work concept, knowledge sharing and openness to development are main pillars of BIMAKS business concept. It is our objective to provide our customers the most logical and sustainable solutions in their effects to provide the best quality water for the industry.





"Sustainable Saving Solutions"

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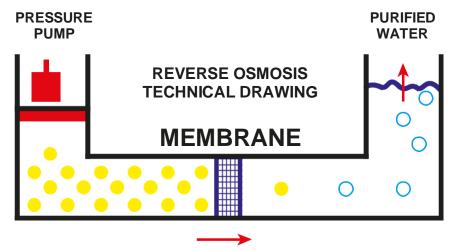


**TEST KITS** 



### REVERSE OSMOSIS TECHNOLOGIES

Reverse Osmosis System is based on the technology that water with a great concentration of contaminants (the source water, can be brackish water as sea water) is forced into a tank containing water with a lower concentration of contaminants (the processed water). In this process the water is forced through a semi permeable membrane. This membrane, allows the passage of water, while rejecting most of the contaminants.



**FLOW DIRECTION** 

Reverse Osmosis System allows converting highly contaminated surface water and sea-water into safe, potable and drinkable quality water. Reverse osmosis technology is being utilized by drinking water bottlers and household users. BIMAKS, designs and produces special chemicals which will increase the operational efficiency of all types of reverse osmosis systems. Through our products; we reduce our customers' costs and increase the life cycles of expensive filter membranes.





American EPA (Environmental Protection Agency) SDWA (Safe Drinking Water Act.) has approved Reverse Osmosis System as the best technology and safe water system.



## REVERSE OSMOSIS SYSTEM PRE-TREATMENT CHEMICALS

### Coagulation and Flocculation Chemicals

RO chemicals designed for cleaning oil and other hydrocarbon based impurities on microfiltration and ultrafiltration membrane systems.

RO chemicals to eliminate Iron and Calcium deposits off the MF and UF membrane systems.

#### What are the benefits of using pre-treatment chemicals?

Improve performance of pre membrane equipments. Prevent biological accumulations

Provide through microorganism control of membrane systems.



#### **ANTISCALANT**

Effective in preventing carbonate, phosphate and sulfate based scales, Effective stabilization of iron, manganese and other metal ions.

Prevents the problems of silica polymerization

Provides the dispersion of metal oxides, colloidal silicate and aluminum silicate. Helps modification of crystal structure of precipitants

### The Benefits of Antiscalant Usage

You may reduce or entirely eliminate acid consumption.

Your membranes will operate at higher recoveries.

High performance even at low dosages.

Bimaks antiscalants are compatible with all membrane types.

ANTISCALANTS	
Effective against calcium carbonate, calcium sulfate & iron (NSF Approved)	MAKS® 400P
High calcium & silicate feedwater (new)	MAKS® 401
Effective against calcium carbonate, calcium sulfate & iron	MAKS® 402
Effective against calcium carbonate, calcium sulfate & iron (high alkalinity feedwater)	MAKS® 403
Effective against calcium carbonate, silicate & iron	MAKS® 404
Effective against calcium carbonate, calcium sulfate & iron	MAKS® 405
Effective against high silicate, calcium & iron	MAKS® 406
Effective against calcium carbonate, calcium sulfate & iron	MAKS® 407
Effective against calcium carbonate & iron (for small ro systems)	MAKS® 410
Effective against high calcium and silicate (for ro systems)	MAKS® 411
Effective against microbiological contamination and mineral deposit	MAKS® 412
Effective chlorine reducing and mineral deposits inhibitor	MAKS® 413
Effective against high silicate & calcium	MAKS® 420
Effective against high silicate, calcium & organics (new high sdi)	MAKS® 425
For sea water treatment (high performance)(new)	MAKS® 426
For sea water treatment	MAKS® 430



#### MEMBRANE CLEANERS

Efficient removal of carbonate, phosphate and sulphate scales.

Removal of polymerized silica and silica polyvalent metal co-precipitants Dissolution of iron and manganese oxide, manganese hydroxide and sulfide deposits.

Penetration and dispersion of biological slime.

Removal of heavy organic foulants, cationic polymers and hydrocarbons.

Dispersion of silt and clay deposits.

### Advantages:

Reduced cleaning time

Effective at lower concentrations.

Removing stubborn foulants from membrane surfaces.

Safe use with membranes in potable water systems.



CLEANING PRODUCTS	
Ultrafiltration membrane cleaner removal of organics (new)	MAKS® 461
Ultrafiltration membrane cleaner removal of metal oxides (new)	MAKS® 462
Membrane cleaner removal of calcium, iron & organics	MAKS® 467
Membrane cleaner removal of organics & metal oxides	MAKS® 482
Membrane cleaner removal of calcium, iron	MAKS® 484
Membrane cleaner removal of silicate, aluminum & manganese	MAKS® 494
Membrane cleaner removal of organics & biofilm	MAKS® 485

MICROORGANISM CONTROL AGENT	
Microorganism control agent for cleaning	MAKS® 471
Microorganism control agent for cleaning or preservation on operation or standby (new)	MAKS® 472
Microorganism control agent for cleaning or preservation on standby	MAKS® 473
Microorganism control agent neutralizer (new)	MAKS® 479
Effective microorganism control agent and biofilm removal (new)	MAKS® 486
Microorganism control agent for feed water	MAKS® 487
Microorganism control agent for feed water (tablet)	MAKS® 488



Corrosion inhibition of distribution systems
Protection for iron, steel and galvanized piping systems
Protection of lead and copper plumbing.
Sequestering of hardness and insoluble iron deposits

#### Advantages:

Reducing the formation capacity of THM in the presence of chlorine. Remarkable reduction in corrosion and leaching of lead from piping Water quality and color improvement due to reduced iron content.

PROTECTIVE PRODUCTS	
Corrosion inhibitor for RO outlet	MAKS® 490
Long term membrane preservation	MAKS® 491
Removal of alkalinity in the RO inlet water (particularly for big systems)	MAKS® 492
Removal of chlorine in the RO inlet water includes organic catalysed	MAKS® 493



#### **EXCELLENT PRODUCT QUALITY**

BIMAKS is proud to supply its high performance chemical products developed to most updated technology. Our R&D supports BIMAKS in its efforts to provide our customers with tailor-made solutions. As BIMAKS we are able to present our products with high quality levels and quality assurance.

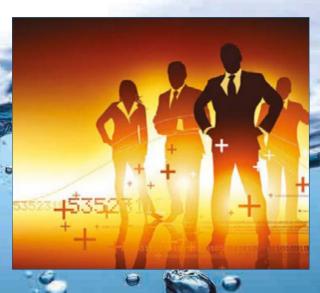
#### FAST AND RELIABLE SERVICE

BIMAKS, in its service laboratory, performs the customer water sample analysis to the highest accuracy and in short time. By entering the report's datas, BIMAKS Antiscalant Software Program identify your reverse osmosis problems and select the most effective antiscalant and the corresponding dosage rate. Our technical service engineers are at your service throughout the operation; until a sustainable result is achieved. We think professional and apply professionally.



### PILOT APPLICATIONS

At Bimaks, we simulate the actual site of our clients in our pilot plants. They are practical and mobile, hence easily made available for our clients. These studies enable our engineers to provide efficient solutions to your scaling and contamination problems



### YSTEM MONITORING AND OPTIMIZATION

We are by our side during the commissioning period of your RO systems and application of Bimaks chemicals. We help to select the optimum membrane system to bur clients formulate the most commical chemicals.



#### LABORATORY SERVICES

At Bimaks, we are capable of applying several analyses of feed water and membrane performance tests. Also, we are able to recommend the correct dosage rates of our antiscalants coagulants and flocculants.



#### **MEMBRANE AUTOPSY**

We perform the membrane autopsy on the membrane layer surfaces. Deposits, scales formations and specific foulants are identified. Relying on the results obtained we recommend the best suitable cleaning method.



### **BOILER WATER TREATMENT**

OXYGEN SCAVENGERS	
Catalyzed liquid for deaerated feed water	MAKS® 1100
Catalyzed powder for deaerated or non deaerated feed water	MAKS® 1100
Catalyzed organic volatile for deaerated feed water	MAKS® 1200
Catalyzed organic, FDA approved for deaerated feed water	MAKS® 1130
Catalyzed organic FDA approved for non deaerated feed water	MAKS® 1140

SCALE INHIBITORS	
For softened alkaline feed water	MAKS® 1200
For low conductivity required softened or demineralized or R.O. feed water	MAKS® 1210
For low alkalinity softened or demineralized or R.O. feed water (add alkalinity & PO <sub>4</sub> )	MAKS® 1220
For low alkalinity softened or demineralized or R.O. feed water (add alkalinity & Disp.)	MAKS® 1230
For boiler systems without softeners (powerful scale inhibitor & on-line cleaner)	MAKS® 1240

CONDENSATE CORROSION INHIBITORS	
CO <sub>2</sub> corrosion inhibitor for all areas of complex condensate lines	MAKS® 1300
CO <sub>2</sub> corrosion inhibitor for medium condensate lines or small condensate systems	MAKS® 1310
CO <sub>2</sub> &O <sub>2</sub> Corrosion inhibitor all areas of complex condensate lines	MAKS® 1320
CO <sub>2</sub> &O <sub>2</sub> Corrosion inhibitor for all areas of complex condensate lines (high alkalinity)	MAKS® 1330
O <sub>2</sub> &CO <sub>2</sub> Corrosion inhibitor for all areas of complex condensate lines (film forming)	MAKS® 1338

DEFOAMER	
Organic based defoamer	MAKS® 1610



MULTIFUNCTIONAL TREATMENT	
Oxygen scavenger and scale inhibitor (low alkalinity feed water)	MAKS® 1400
Oxygen scavenger and scale inhibitor (high alkalinity feedwater)	MAKS® 1410
Oxygen scavenger and scale inhibitor (RO & remineralized feedwater)	MAKS® 1420
Organic oxygen scavenger and scale inhibitor (for raw feedwater & scale removal)	MAKS® 1430
Oxygen scavenger and scale inhibitor (for raw feedwater & scale removal)	MAKS® 1440
Oxygen scavenger, scale inhibitor, condensate protection (low alkalinity feedwater)	MAKS® 1520
Oxygen scavenger, scale inhibitor, condensate protection (high alkalinity feedwater)	MAKS® 1530
Organic oxygen scavenger, scale inhibitor, condensate protection (for raw feedwater & scale	
removal)	MAKS® 1530
Oxygen scavenger, scale inhibitor, condensate protection (for raw feedwater & scale removal)	MAKS® 1550

pH REGULATION	
pH regulator	MAKS® 1620
pH regulator & buffer	MAKS® 1621

MUD REMOVER	
Mud remover	MAKS® 1630
Mud remover & defoamer	MAKS® 1631

OTHERS	
Boiler protection on stand-by	MAKS® 1640
Fire side cleaner (fuel-oil)	MAKS® 1650
Softener resin cleaner	MAKS® 1660
Boil-out compound	MAKS® 1670
Hot water boiler treatment (soft feedwater)	MAKS® 1680
Hot water boiler treatment (raw feedwater)	MAKS® 1690



### COOLING WATER TREATMENT

SCALE & CORROSION INHIBITORS	
For hard feedwater systems (steel)	MAKS® 2100
For hard feedwater systems (steel, copper)	MAKS® 2110
For hard feedwater systems (steel, copper) New Product High Performance	MAKS® 2120
For hard feedwater & High Suspended Solid systems (steel, copper)	MAKS® 2120
For hard feedwater and bacteria control (all in one product) New Product	MAKS® 2140

CORROSION & SCALE INHIBITORS	
For soft feedwater systems (low conductivity)	MAKS® 2200
For soft feedwater systems (high conductivity)	MAKS® 2210
For soft feedwater systems (high alkalinity)	MAKS® 2220
For soft feedwater and bacteria control (all in one product) New Product	MAKS® 2230

OTHERS	
For new systems start up (pre-treatment)	MAKS® 2240
Copper	MAKS® 2250
Special product for evaporative cooling towers	MAKS® 2260
Defoamer	MAKS® 2270
pH regulator	MAKS® 2280

### **CLOSED SYSTEM TREATMENT**

CORROSION & SCALE INHIBITOR	
Soft or Demineralized feedwater systems (steel, copper)	MAKS® 3000
Soft or Demineralized feedwater systems (aluminum)	MAKS® 3100
Soft or Demineralized feedwater systems (semi-closed systems)	MAKS® 3200
Soft or Demineralized feedwater systems (semi-closed systems) High Protection	MAKS® 3300
Soft or Demineralized feedwater systems (all in One) New Product	MAKS® 3310
Hard feedwater systems	MAKS® 3320
Soft or Demineralized feedwater systems (contains antifreeze)	MAKS® 3330

OTHERS	
For new systems start up (pre-treatment)	MAKS® 3340
Laser system cooling protection	MAKS® 3350



### POTABLE WATER TREATMENT

CORROSION & SCALE INHIBITORS	
Soft feedwater systems	MAKS® 5000
Soft feedwater systems (hot lines)	MAKS® 5010
Soft feedwater systems (powerful corrosion inhibitor)	MAKS® 5020

SCALE & CORROSION INHIBITORS	
Hard feedwater systems	MAKS® 5030

CORROSION & MICROBIOLOGICAL CONTROL	
Soft feedwater systems (particularly effective against legionella)	MAKS® 5040

OTHER	
For new systems start up (pre-treatment)	MAKS® 5050



### MICROORGANISM CONTROL AGENT

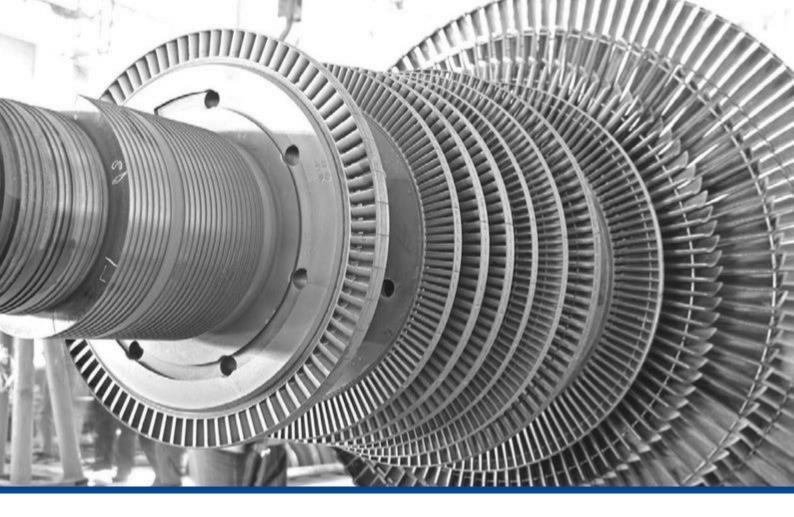
OXIDISING	
Open cooling systems (high pH)	MAKS® 4000
Open cooling systems (high pH, biofilm removal)	MAKS® 4010
Open cooling systems (solid bromine tablets)	MAKS® 4020
Open cooling systems (solid chlorine tablets)	MAKS® 4030
Open cooling systems (solid chloramines tablets)	MAKS® 4040
Open cooling systems (stabilized chlorine)	MAKS® 4050
Open cooling systems (solid chloramines granule)	MAKS® 4060
Open cooling systems (hydrogen peroxide with silver)	MAKS® 4070

NON OXIDISING	
Open & closed system (particularly for algae & bacteria)	MAKS® 4080
Open & closed system (particularly for fungi & bacteria)	MAKS® 4090
Open & closed system (particularly for sulfate reducing bacteria)	MAKS® 4100
Open & closed system (particularly for algae, bacteria & fungi)	MAKS® 4110
Open & closed system (particularly for closed system nitrite application)	MAKS® 4120
Open & closed system (particularly for sea water cooling application)	MAKS® 4130

OTHER	
Biodispersant	MAKS® 4140
Biodetergent	MAKS® 4141
HVAC Fancoil tablet microorganism control agent	MAKS® 4150
Hypochlorite activity enhancer (high pH applications)	MAKS® 4160



INDUSTRIAL CLEANING CHEMICALS			
Aluminum Cleaner ( scale & organic removal )			
Aluminum HVAC Coil Cleaner			
Scale Removal ( steel, copper, cast iron )			
Scale, Rust, Oil Cleaning & Passivation			
UV Lamp Cleaner			
Scale, Rust, Oil, Silicate, Phosphate based deposit cleaner			
Scale & Rust Cleaner ( steel & copper)	MAKS® 130		
Scale, Oil, Rust Cleaner ( galvanized & chrome goating )			
Scale & Rust Powder Cleaner ( steel, copper, cast iron)			
Scale, Rust, Manganere Cleaner (titanium)			
Laser Coolant Scale, Rust & Oil Cleaner			
Scale, Rust, Oil Cleaner & Passivation at Neutral Condition (pH = 7)			
Powerful Rust Remover ( steel, copper, cast iron)			
Strong Inorganic Acid Inhibitor			
Scale, Organic Deposits & Sludge Removal (sugar or tomato evaporator)			
Boil - Out Compound ( new boiler start-up application)			
Softener Resin Cleaner			
Softener Resin			



#### **GAS TURBINE CLEANER**

By the beginning of 2015, BIMAKS KIMYA had noticed the huge need for gas turbine cleaners in Middle East & North Africa. This product is very important for Electric and Power divisions as it has cleaning properties for special equipment related to the same field.

Since then, BIMAKS KIMYA could manage through its own highly experienced technical team to manufacture a very high quality product with a very competitive price compared with international.

By late 2015, BIMAKS KIMYA made a field trial in the Ministry of Electricity in Iraq. We gained their approval after testing on different gas turbine brands and capacities.

In fact, the Engineers and technicians observed lower vibration rate for turbines after using MAKS GTC which is considered as a sign of both high performance and quality for this product.

For the moment, our strategy is to use this approval and move around the world from market to another until MAKS GTC compete many international brands that are being made in UK & USA.



AUTOCLAVE PRODUCTS	
Scale Inhibitor (hard feedwater)	MAKS® 500
Can brightener & Scale Inhibitor (oily & hard feedwater)	MAKS® 501
Scale and Corrosion Inhibitor (soft or demineralized feedwater)	MAKS® 502
Scale & Corrosion Inhibitor (hard feedwater)	MAKS® 503
For new systems start up (pre-treatment)	MAKS® 504

WASTE WATER CHEMICALS			
Anaerobic bacteria (gas improvement, grease consumption, process balance)			
Drain lines odor treatment, pretreatment, lagoon			
Particularly food drain treatment (reduces fat & food wastes, stop plugging)			
Particularly for oil plants waste treatment (heavy hydrocarbon removal)			
Oil refineries & Petrochemical plants waste treatment			
Domestic waste treatment (cellulose, protein, grease, fiber, etc.)			
Industrial Food Waste Treatment (cellulose, protein, grease, fiber, etc.)			
Treatment of Filamentous bacteria (paper, brewery, alcohol manufacturing)			
Treatment of Nitrification bacteria, ammoniated waste (oil, mining, etc.)			
Pulp & Paper Waste Treatment (cellulose, linen fiber, etc)			
High lifetime organics (chemical, pharmaceutical, etc)			
Anionic Polyelectrolyte			
Nonionic Polyelectrolyte			
Cationic Polyelectrolyte			

GEOTHERMAL WATER TREATMENT	
Scale Inhibitor (high sulfate source)	MAKS® 600
Scale Inhibitor (high temperature resistant 230°C)	MAKS® 605
Scale Inhibitor (very high temperature resistant 350°C)	
Scale Inhibitor (high silicate source)	MAKS® 615
Scale Inhibitor (particularly suited for geothermal cooling towers)	MAKS® 620
Corrosion Inhibitor (steam & brine lines)	MAKS® 625

### **TEST KITS**

No	Kod	Test kit for substance content
1	BM 5000	Alkalinity Test Kit
2	BM 5010	Aluminium Test Kit
3	BM 5020	Ammonia Test Kit
4	BM 5030	Arsenic Test Kit
5	BM 5040	Asetic Acid Test Kit
6	BM 5050	Total acidity and Mineral Test Kit
7	BM 5060	Copper Test Kit
8	BM 5070	Bromine Test Kit
9	BM 5080	Zinc Test Kit
10	BM 5090	Iron Test Kit
11	BM 5100	Fluoride Test Kit
12	BM 5110	Formaldehyde Test Kit
13	BM 5120	Orto-Phosphate Test Kit
14	BM 5130	Glutaraldehyde Test Kit
15	BM 5140	Hydrazine Test Kit
16	BM 5150	Hydrogen Peroxide Test Kit
17	BM 5160	Calcium Test Kit
18	BM 5170	Calcium Carbonate Test Kit
19	BM 5180	Carbon Dioxide Test Kit
20	BM 5190	Chlorine Dioxide Test Kit
21	BM 5200	Chlorine-Total DPD Method
22	BM 5220	Chlorine Test Kit
23	BM 5230	Caustic Test Kit
24	BM 5240	Total Chromium Test Kit
25	BM 5250	Chromium +6 Test Kit
26	BM 5260	Chromate Test Kit
27	BM 5270	Lead Test Kit
28	BM 5280	Magnesium Test Kit

EQUIPMENT
Dosing pump
The fan
Diffuser
Sewage pump
Monos pump
Water analyzer
Decanter
Exhaust fan
Oil tank



### **ENVIRONMENT FRIENDLY**

At Bimaks, one of our main objective is to realise environmental friendly ideas.

We are fully aware of the critical importance of the environment for a healty generation, clean world, promising future.

Through our modern and economical chemical solutions, we help you to create saving on water resources and your expenditures.

We believe that tomorrow's nature is created today.



### BIMAKS

BİMAKS KİMYA GIDA DIŞ TİCARET LTD. ŞTİ. Fsm mah. Poligon cad. Şiir sokak. No: 10 RELUX RSO 50 Plaza 1. Kat Tepeüstü/ Ümraniye/ İSTANBUL/ TÜRKİYE

Tel: +90 850 522 71 04 Faks: +90 216 321 32 13 info@bimakskimy.com www.bimakskimya.com.tr