ASKEECO GROUP

INNOVATIVE AND EXPERT SOLUTIONS IN WATER TREATMENT



ABOUT US

ASKEECO is a leading company in providinghigh performance chemicals, 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. **ASKEECO** is foundedby an expert in the business with his innovative development know-how and environment sensitive recipes. **ASKEECO** has created itself a name as a customer-oriented service company.

Teamwork concept, knowledge sharing and openness to development are main pillars of **ASKEECO** business concept. It is our objective to provide our customers themost logical and sustainable solutions in their effects to provide the best qualitywater for the industry.

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APPLICATIONS

We work closely with our customers to understand their applications and the challenges they face.

This in turn helps to deliver products and services which supports our customer needs .





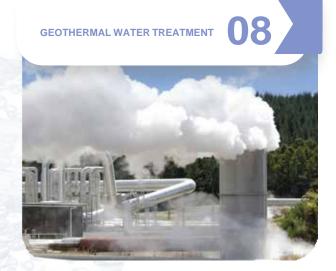










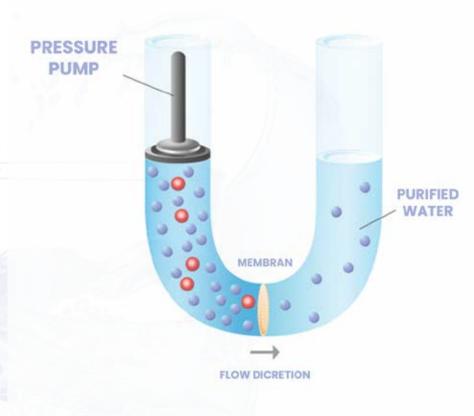






REVERSE OSMOSIS TECHNOLOGIES

Reverse Osmosis system 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 а semipermeable This membrane. membrane allows the passage of water, while rejecting most of the contaminants.



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 ASKEECO, designs and produces special chemicals which increase the operational efficiency of all types of reverse osmosis systems. Through our products; we reduce our customer's costs and increase the life cycle 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 the performance of pre-membrane equipment.

Prevent biological accumulations.

Provide through microorganism control of membrane systems.



ANTISCALANT

Antiscalant is a chemical additive for reverse osmosis systems that is highly effective in preventing the formation of scale on the membranes. The antiscalant is normally injected into feedwater before it enters the reverse osmosis system.

Calcium carbonate, calcium sulfate & iron (NSF approved)	ASK 511Q
High calcium & silicate feedwater	ASK 512
Calcium sulfate, calcium carbonate & iron (High Performance)	ASK 513
Calcium carbonate & iron (high alkalinity feedwater)	ASK 514
High calcium and silicate (for Small RO systems)	ASK 522
Microbiological contamination and mineral deposits	ASK 523
Calcium carbonate, calcium sulfate, iron & Antifoulant	ASK 548
High silicate & calcium	ASK 531
Sea Water Applications	ASK 541
Calcium sulfate & barium sulfate	ASK 915
Sea Water Applications	ASK 941
High silicate & calcium	ASK 956
Calcium carbonate, calcium sulfate & iron	ASK 991

The Benefits of Antiscalant Usage

- You may reduce or entirely eliminate acid consumption
- Your membranes will operate at higher reciveries.
- High performance even at low dosages.
- ASKEECO antiscalants are compatible with all membrane types.

MEMBRANE CLEANERS

- Efficient removal of carbonate, phosphate and sulfate 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.





BEFORE AFTER

CLEANING PRODUCTS



Removal of organics - UF membrane	ASK 575
Removal of metal oxides - UF membrane	ASK 577
Organics & biofilm removal - RO membranes	ASK 578
Alkaline RO membrane cleaner - (Powder Form)	ASK 579
Alkaline RO Membrane cleaner removal of organics & metal oxides	ASK 593
Alkaline RO Membrane cleaner removal of organics & metal oxides	ASK 594
Acidic RO membrane cleaner - (Powder Form)	ASK 5102
Acidic RO Membrane cleaner removal of silicate, aluminum, iron & manganese	MAKS 5105

MICROORGANISM CONTROL AGENT

Microorganism control agent for cleaning and feed water	ASK 582
Microorganism control agent for cleaning or preservation on standby	ASK 584
Microorganism control agent Cleaner and biofilm removal	ASK 597
Microorganism control agent for RO feed water	ASK 598

POST TREATMENT CHEMICALS

- 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	The same of the sa	ASK 5101
Dichlorination of RO inlet	water (includes organic cat	talyzer)	ASK 5104

SEA WATER EVAPORATORS



ANTISCALANTS	
Scale and fouling in MSF plants (Neutral)	ASK 561
Scale and fouling in MSF plants (Acidic)	ASK 562
Antiscalant/Antifoam for MSF plants (Acidic)	ASK 563
Scale and fouling in MSF plants	ASK 564
Antiscalant/Antifoam for MSF plants	ASK 565
To control foaming and priming in seawater distillation plants	ASK 566



EXCELLENT PRODUCT QUALITY

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

FAST AND RELIABLE SERVICE

ASKEECO, in its service laboratory, performs the customer water sample analysis to the highest accuracy in a short time. By entering the report's data, ASKEECO Antiscalant Software Program identifies your reverse osmosis problems and selects the most effective antiscalant and the corresponding dosage rate. Our engineers are at your service throughout the operation; until a sustainable result is achieved.





PILOT APPLICATIONS

At ASKEECO, 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.

SYSTEM MONITORING & OPTIMIZATION

We are by your side during the commissioning period of your RO system and application of ASKEECO.

We help to select the optimum membrane system for our clients and formulate the most economical chemicals.



LABORATORY SERVICES

At **ASKEECO**, 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 result obtained we recommend the best suitable cleaning method.

BOILER WATER TREATMENT



OXYGEN SCAVENGERS	
Catalyzed oxygen scavenger liquid SMBS	ASK 2211
Catalyzed oxygen scavenger liquid Sodium Sulphite - RO feed	ASK 2213
Catalyzed oxygen scavenger powder SMBS	ASK 2221
Catalyzed oxygen scavenger liquid DEHA	ASK 2232
Oxygen scavenger - Carbohydrazide based	ASK 2233
Oxygen scavenger - Hydrazine based	ASK 2234

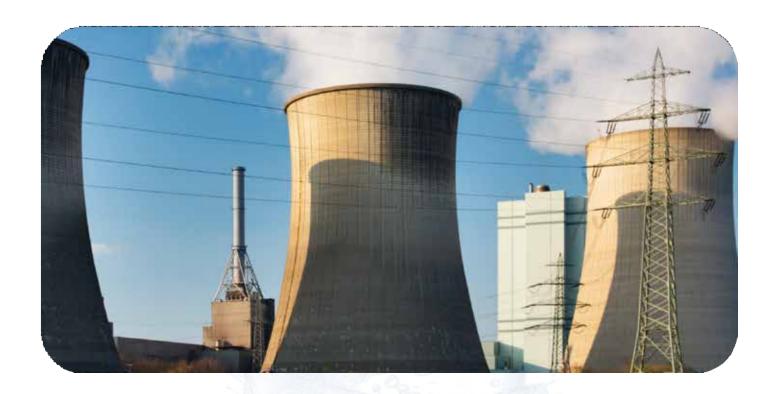
SCALE INHIBITORS	
Effective For softened alkaline feed water	ASK 3211V
For low alkalinity softened or demineralized or RO feed water (add alkalinity & PO4)	ASK 2311
For low alkalinity softened or demineralized or RO feed water (add alkalinity & Disp.) (Non phosphate)	ASK 2343
Special scale inhibitors, cleaners and removers - Online Cleaner	ASK 2351
Powerful scale inhibitor & on-line cleaner	ASK 2352

CONDENSATE CORROSION INHIBITORS	
CO2 corrosion inhibitor for all areas of complex condensate lines	ASK 2411
CO2 corrosion inhibitor for steam and complex condensate systems	ASK 2412
CO2 corrosion inhibitor for medium condensate lines or small condensate systems	ASK 2421
CO2 & O2 corrosion inhibitor all areas of complex condensate lines	ASK 2431
Organic Filmer and neutralizing amine	ASK 2441
Organic Filmer and neutralizing amine (High Alkalinity)	ASK 2452

OTHERS	
Organic based defoamer	ASK 2721
Alkalinity Booster	ASK 27210
Boiler protection on stand-by	ASK 2751
Boil-out compound	ASK 2781
Hot water boiler treatment (soft feedwater)	ASK 2791

MULTIFUNCTIONAL TREATMENT	
Oxygen scavenger and scale inhibitor & removal (high alkalinity feed water)	ASK 2526Q
Oxygen scavenger and scale inhibitor & removal (RO & remineralized feed water)	ASK 2531
Oxygen scavenger and scale inhibitor (for RO and demineralized water)	ASK 2536
Oxygen scavenger and scale inhibitor (for Soft feedwater & scale removal)	ASK 2551
Oxygen scavenger, scale inhibitor, condensate protection (for Soft feedwater & scale removal)	ASK 2661I
Oxygen scavenger, scale inhibitor, condensate protection (for RO and demineralized water)	ASK 2671I
Oxygen scavenger, scale inhibitor, condensate protection (with polyamine)	ASK 2681

COOLING WATER TREATMENT



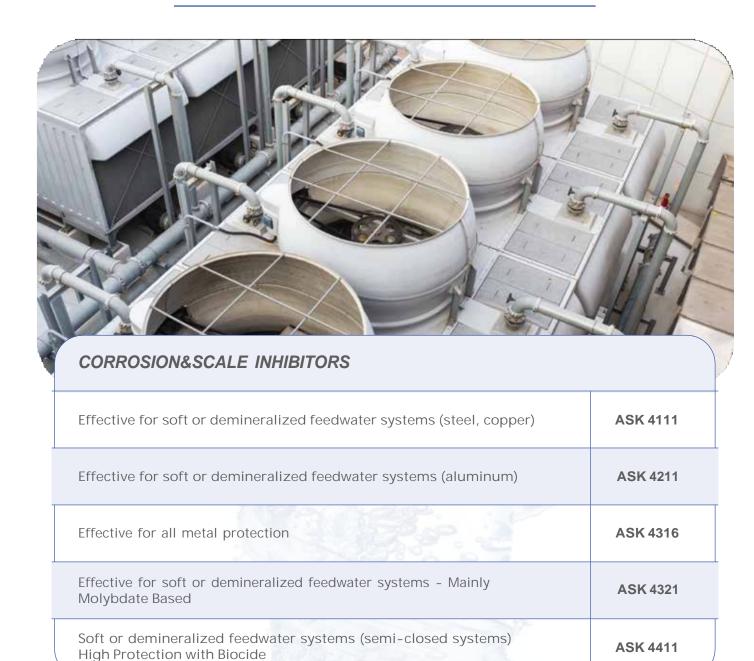
SCALE INHIBITORS	
For calcium sulfate, calcium carbonate	ASK 3211Q
High alkalinity and hardness	ASK 3212
For high alkalinity, high heat and high hardness - Non phosphate	ASK 3219B
For hard feedwater systems (steel, copper)	ASK 3221B
For high hardness and high alkalinity, very powerful	ASK 3228
For hard feedwater systems with chlorine stabilizer (for all surfaces)	ASK 31022



CORROSION INHIBITORS	
Effective for soft & RO feed water (Environmental friendly)	ASK 3316CI
For soft feedwater systems (high conductivity) - Zinc Based	ASK 3321
Multifunctional Products for Corrosive and hard water - Zinc Based	ASK 3326
Multifunctional Products for Corrosive and hard water - Zinc Based	ASK 33101

OTHERS	
Cleaning and passivation product for new cooling systems	ASK 3351
Effective for Copper Treatment - Azole based	ASK 3361

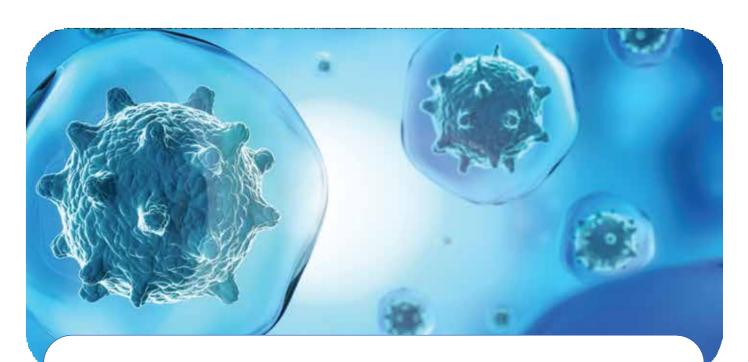
CLOSED COOLING SYSTEM TREATMENT



POTABLE WATER TREATMENT

CORROSION & SCALE INHIBITORS		
For soft water	ASK 6131	

MICROORGANISM CONTROL PRODUCTS

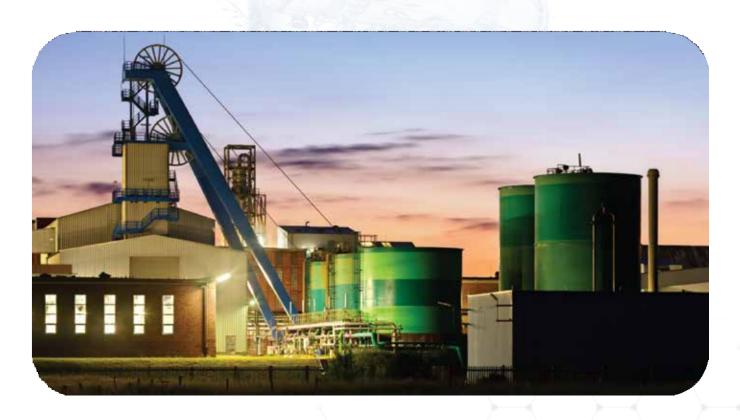


MICROORGANISM CONTROL PRODUCTS

Oxidizing microorganism control agent - Bromine based	ASK 5111
Non Oxidizing, Non foaming Microorganism agent (cooling towers) (Fast Acting)	ASK 5182
Non Oxidizing, Non foaming Microorganism agent (cooling towers)	ASK 5191
Non Oxidizing, Non foaming Microorganism agent (closed systems)	ASK 5192
Super concentrated non Oxidizing, Non foaming Microorganism agent (cooling towers)	ASK 5196
Non Oxidizing, Highly foaming Microorganism agent (cooling towers)	ASK 5223
Concentrated non Oxidizing, Highly foaming Microorganism agent (cooling towers)	ASK 5226
Concentrated non Oxidizing, Highly foaming Microorganism agent (cooling towers) Super Concentrated	ASK 5224

OTHERS	
A Combination of microorganism agent compounds and Bio dispersant (cooling towers)	MAKS 4132
Bio dispersant	MAKS 4141
Oil Dispersant	MAKS 4146
Hypochlorite activity enhancer	MAKS 4160

MINING PRODUCTS	
Antiscalant for mining industry	MAKS 400A
Antiscalant for mining industry - non phosphate	MAKS 8070



WASTE WATER CHEMICALS



Anionic polyelectrolyte	ASK 7221
Cationic Polyelectrolyte	ASK 7241
Coagulant – Iron based	ASK 7271
Coagulant – PAC Based	ASK 7331
Cationic Coagulant liquid	ASK 7551
Coagulant – aluminum sulphate Based	ASK 7631

GEOTHERMAL WATER TREATMENT



Products Benefits:

- Effective against scales formed by hardness salts and silica to increase the system efficiency and prevent tube failures.
- Prevents the formation of FeOx, CaCO3, CaSO4, CaxPOy, BaSO4, SrSO4, Si, MgO and MnO scales.
- Specially developed for high conductivity geothermal wells.

Scale inhibitor for hot wells (up to 170°C)	ASK 7396
High performance – Super concentrated	ASK 73101
Scale inhibitor for hot wells (up to 300°C)	ASK 73106

INDUSTRIAL CLEANING CHEMICALS

Aluminum cleaner	ASK 2110
Scale, rust, oil, silicate, phosphate based deposit cleaner (SS surface)	ASK236
For iron oxide (rust) and hardness salts (Copper and SS surface)	ASK 243
Scale & rust powder cleaner (steel, copper, cast iron)	ASK 251H
Neutral cleaner for sensitive metals containing systems	ASK 273
Iron oxide (rust) & hardness salts cleaner	ASK 283
Acid corrosion inhibitor	ASK 294
Biocide tablet for air conditioning systems	ASK FAN COIL TABLET
Plastics and P.E.T. cleaner in the recycling process	ASK Q.C.U. CLEAN

Cleaning product for polycarbonate & glass bottles	ASK BOTTLE CLEAN
Super concentrated surface cleaner	MULTI 26
Alcohol based hand cleaner – Gel	DERMO 26
Alcohol based hand cleaner – Liquid	DERMO 26L
Stubborn & layered oil residuals, grease, wax, tar, carbon, scrum cleaner	AQUA 21
Oil & dirt cleaner	AQUA 22
Acid free aluminum cleaner	AQUA 23



ENVIRONMENT FRIENDLY

At ASKEECO, one of our main objectives is to release environmentally friendly ideas. We are fully aware of the critical importance of the environment for a healthy generation, clean world, and a promising future. Through our modern and economical chemical solutions, we help you to create savings on water resources and your expenditures.

We believe that tomorrow's nature is created today.



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