CHEMPORT
Specialty Chemical Experts



WATER TREATMENT

Chemport supplies a full range of bulk and specialty chemicals for drinking water, cooling towers, process water, and wastewater treatment. For potable water systems, products such as aluminium sulfate and PAC support turbidity removal, clarification, and efficient solids management. In industrial water systems, including cooling towers and process water circuits, Chemport's scale and corrosion control chemistries such as HEDP, DTPMP, and polycarboxylates help maintain system performance, control mineral deposits, and protect critical equipment.

For wastewater treatment, Chemport offers coagulants for phosphorus and metal removal, polymers for sludge thickening and dewatering, and oxidants such as hydrogen peroxide for advanced oxidation and organic removal. Chemport also supports foam control and formulation technologies used in water treatment programs, including PDMS fluids, silicone emulsion defoamers, and formulation performance additives such as hydrophobic and hydrophilic fumed silica.

With Australia-based blending, local warehousing, and application expertise, Chemport delivers reliable supply and tailored solutions across municipal and industrial water treatment operations.

Chemport • Bulk Chemicals and Specialty Performance Materials •
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PH ADJUSTMENT AND ALKALINITY CONTROL

Magnesium Oxide (MgO)
Magnesium oxide is used for pH adjustment and alkalinity control in water treatment processes. Its gradual solubility provides sustained buffering capacity, making it an excellent choice for stabilizing acidic waste streams.

Magnesium Chloride
Magnesium Chloride is a highly soluble magnesium salt used in industrial water treatment and process water systems. It provides a reliable source of magnesium ions and can support hardness adjustment, mineral balance, and treatment processes where controlled magnesium addition is required.

Calcium Chloride
Calcium Chloride is a highly soluble calcium salt used in industrial water treatment and process water conditioning. It provides a reliable source of calcium ions for hardness adjustment and mineral balance and is suitable for applications requiring controlled calcium addition.

Lactic Acid
Lactic Acid is a biodegradable organic acid used for controlled pH adjustment in industrial water and wastewater treatment systems. It provides a milder, more manageable alternative to mineral acids, allowing precise pH correction with reduced corrosion risk. Its organic nature makes it suitable for applications where environmental compatibility and process stability are important.

Potash (Potassium Carbonate)
Potassium carbonate used as an alkalinity and pH adjustment agent in industrial water treatment and chemical processing applications. It offers strong buffering capacity and is widely used where potassium-based alkalinity sources are preferred.

Phosphoric Acid
Concentrated inorganic acid used for controlled pH adjustment and acidification in industrial water and wastewater treatment systems. Suitable for process water conditioning and treatment formulations where reliable acidity and controlled pH reduction are required.

Soda Ash Light
High-purity sodium carbonate used to increase pH and alkalinity in industrial water and wastewater treatment systems. Provides effective alkalinity control and buffering and is suitable for neutralising acidic water streams and supporting stable treatment conditions.

FORMULATION PERFORMANCE ADDITIVES

SILANOX™ Hydrophobic Fumed Silica
Surface-treated fumed silica designed to enhance performance in silicone antifoam and defoamer formulations. Improves foam-breaking efficiency and provides structural stabilization in silicone systems while enhancing moisture resistance and flow properties in powder formulations.

SILANOX™ Hydrophilic Fumed Silica
High-purity fumed silica used as a rheology modifier, thickening agent, and anti-settling additive in liquid formulations. High surface area supports viscosity control and suspension stability, improving consistency and handling in water treatment and industrial process chemical systems.

FLUORIDE

Sodium Fluoride
Sodium Fluoride is widely used in municipal water treatment for controlled fluoridation to help prevent tooth decay. It is supplied as a high-purity, free-flowing material that dissolves readily, ensuring accurate dosing and consistent water quality. Its proven safety and effectiveness make it a standard additive in drinking water treatment programs.

FOAM CONTROL

SILANOX™ PDMS
Polydimethylsiloxane (PDMS) fluids used as the active silicone component in high-performance antifoam and defoamer formulations for municipal and industrial water treatment systems. Provides rapid foam knockdown and durable suppression in aeration basins, sludge processing, and industrial wastewater operations.

SILANOX™ Silicone Emulsion Antifoams
Silicone emulsion defoamers formulated for rapid dispersion and effective foam control in aqueous treatment systems. Available in concentrations from 10–30%, these products deliver fast knockdown and persistent suppression in municipal and industrial wastewater treatment, fermentation, and other highfoaming process operations.

SCALE AND CORROSION CONTROL

HEDP (1-Hydroxyethylidene-1,1-Diphosphonic Acid)
HEDP is a popular scale and corrosion inhibitor used in industrial water treatment, particularly in cooling systems and reverse osmosis units. It provides good thermal and hydrolytic stability and is effective across a broad pH range.

ATMP (Aminotris Methylenephosphonic Acid)
High-purity amino trimethylene phosphonic acid used for scale and corrosion control in industrial water treatment systems. Its strong metal chelation properties help control mineral deposits and support effective treatment of recirculating cooling water systems.

DTPMP (Diethylenetriaminepenta Methylenephosphonic Acid)
DTPMP is a high-performance phosphonate that prevents scale and corrosion under severe operating conditions. It is especially effective in high-temperature, high-hardness systems and is compatible with a wide range of water chemistries.

PBTC (2-Phosphonobutane-1,2,4-Tricarboxylic Acid)
PBTC is a high-stability organophosphonate used to prevent scale formation and corrosion in industrial water systems. Its resistance to hydrolysis and chlorine makes it suitable for use in high-temperature or oxidizing environments.

EDTMP (Ethylenediamine Tetramethylene Phosphonic Acid)
EDTMP is a chelating agent that binds metal ions, improving the performance of water treatment additives. It is commonly used in cooling towers and boiler systems to control scale and enhance the efficiency of corrosion inhibitors.

Polycarboxylate Scale Inhibitors
Polycarboxylates are versatile polymers that inhibit scale formation across a wide range of water conditions. They work by dispersing crystal nuclei and stabilizing hardness ions, thereby improving the efficiency and lifespan of water treatment equipment.

WASTEWATER

SLUDGE DEWATERING AND CONDITIONING

Cationic Polyacrylamides
Cationic polyacrylamides enhance sludge thickening by binding to negatively charged particles and improving floc structure. They are effective in gravity thickeners, centrifuges, and belt filter presses for efficient solids capture.

Anionic Polyacrylamides
Anionic polyacrylamides are used to dewater sludge by promoting the aggregation of fine particles into larger flocs. They improve sludge cake solids, reduce disposal volumes, and are suitable for use in both municipal and industrial plants.

ODOUR CONTROL

Calcium Nitrate
Calcium Nitrate is widely used in wastewater treatment for odour control by preventing hydrogen sulfide formation. It supports biological denitrification and reduces corrosion in sewer networks, improving overall plant performance.

Calcium Ammonium Nitrate
Calcium Ammonium Nitrate is an effective alternative for odour management in wastewater systems. It promotes biological activity that mitigates sulfide generation and enhances network stability.

Magnesium Hydroxide Slurry
Magnesium Hydroxide Slurry is a safe and effective solution for odour and corrosion control in wastewater systems. It provides controlled pH adjustment and alkalinity for biological treatment while reducing hydrogen sulfide formation. Its non-hazardous nature makes it a preferred alternative to caustic soda in many municipal and industrial applications.

SPECIALTY AND SUPPORT CHEMICALS

COLLOIDAL-SIL™ / Nano-Silicas
COLLOIDAL-SIL™ and nano-silicas are used as coagulant aids or membrane pretreatment agents. They improve particle agglomeration and sludge conditioning, leading to enhanced filtration and reduced fouling in ultrafiltration or RO systems.

Defoamers
Defoamers control and eliminate foam generated in aeration tanks, clarifiers, and chemical dosing systems. They improve process stability and prevent overflow or disruption caused by excessive foam during treatment operations.

Sodium Salt of 2-Acrylamido-2-methylpropanesulfonic Acid, 50% (ATBS.Na 50%)
A water-soluble monomer used to improve performance in various industrial applications, including water treatment, oilfield chemicals, and personal care products. It is valued for its high anionic charge density, thermal stability, and ability to enhance viscosity and salt tolerance in formulations.

Sodium Hypophosphite Monohydrate
Sodium hypophosphite monohydrate is a crystalline reducing agent and chemical intermediate used in the manufacture of water treatment chemicals. It serves as a raw material in chemical synthesis, where its reducing properties support reactions used to produce specialised treatment additives.

Sulfamic Acid
High-purity inorganic acid used for descaling, equipment cleaning, and pH adjustment in industrial and water treatment systems. Commonly used for boiler cleaning, membrane maintenance, and removal of mineral deposits and scale buildup.

COAGULATION AND PHOSPHORUS REMOVAL

Aluminium Sulfate
Aluminium Sulfate, commonly known as alum, is used to coagulate and remove fine particles and turbidity from water. It is widely applied in both drinking water and wastewater systems for its cost-effectiveness and reliable performance in floc formation.

Polyaluminium Chloride (PAC)
PAC is a high-efficiency coagulant that improves clarification and sludge compaction in water treatment. Its pre-hydrolyzed form allows for faster floc formation and reduced sludge volume compared to traditional coagulants like alum or ferric salts.

Sodium Aluminate
Sodium Aluminate serves as both a coagulant and pH adjuster, particularly useful for phosphorus removal in wastewater treatment. It is often combined with other coagulants to enhance performance while maintaining optimal alkalinity levels.

Ferric Chloride
Ferric Chloride is a highly effective coagulant used in wastewater treatment for the removal of suspended solids, phosphorus, and heavy metals. It forms dense flocs that settle rapidly, improving sludge dewatering and reducing residual turbidity in treated effluent.

Ferric Sulfate
Ferric Sulfate is an effective alternative to ferric chloride when low chloride content is required. It delivers strong coagulation and phosphorus precipitation capabilities, making it ideal for municipal and industrial wastewater systems.

Aluminium Chlorohydrate (ACH)
ACH is a high-performance coagulant with higher basicity than standard alum, offering superior turbidity removal and reduced sludge production. It is especially beneficial in low-temperature or low-turbidity water conditions.

OXIDISERS

Calcium Bromide
Calcium Bromide is available in both solid form (powder or flake) and as a concentrated liquid brine. It is used in water treatment as a source of bromide ions, which can be activated to help oxidize contaminants and control microbial growth.

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