CHEMPORT
Specialty Chemical Experts

OIL & GAS

Our product range includes raw materials and innovative high-performance solutions for formulating engineered products used in drilling and cementing oil wells. These unique chemistries meet the industry's growing demands for efficiency, productivity, and sustainability.

Ingredients range from dispersants and water reducers to retarders, accelerators, fillers, defoamers, cement alternatives, corrosion inhibitors, fluid loss control agents, and viscosity modifiers.

Chemport • Bulk Chemicals and Specialty Performance Materials •
www.chemport.com.au • Level 9, Tower A, 821 Pacific Highway, Chatswood NSW 2067
Australia • **Main** : +61 2 9188 9303 • **Email** : sales@chemport.com.au

ACCELERATORS

Calcium Chloride

Calcium chloride is used as an accelerator and increases the cement slurry strength. It is an economical option that significantly reduces thickening time and acts as an accelerator regardless of concentration, unlike many other accelerators. Offered in both anhydrous and 77% flake.

Calcium Nitrate

Calcium nitrate is used as an accelerator in cementing slurries while helping increase the overall strengths. Offered in both anhydrous and tetrahydrate forms.

Sodium Aluminate

Sodium Aluminate is a thixotropic additive designed to help control free water while promoting early strength development.

COLLOIDAL-SIL™ / GEO-SIL™

Colloidal silicas, also known as nano-silica or nano-sols, are used as accelerators in cement systems to reduce thickening time and improve compressive strength, gas migration control, and permeability.
COLLOIDAL-SIL™ and GEO-SIL™ for geo-polymer cementing applications are available in a variety of grades depending on use and application.
Recommended grades include: NS6 (15%), NS7 (15%), NS8 (20%), and NS20 (40%).

Calcium Sulfate Hemihydrate

Calcium sulfate hemihydrate can help reduce costs while improving the overall properties in thickening and set times in cement slurries.

LITH™ - Engineered

Engineered lithium silicates are formulated with potassium methyl silicate (formulated as a film-forming additive to reduce shale hydration and filtration loss in the high-temperature drilling fluid for maintaining bore hole stability. These products can also function as accelerators. Available grades include Lithium Silicate (LS/PMS) and Lithium Silicate Hybrid (LPS/PMS), a lithium/potassium blend combined with potassium methyl silicate.

Potassium Silicate Anhydrous

Potassium silicate anhydrous is a fine, white powder. When dissolved in water, it forms a hazy, colorless colloidal solution. It is valued for its binding, chemical stability, and high silica content, making it suitable for multiple industrial applications.

Sodium Metasilicate

Sodium Metasilicate (both anhydrous and pentahydrate forms) serves as an effective alkaline accelerator in oil-well cementing applications, enhancing early strength and reducing set times. It improves slurry stability by minimizing free water and preventing solids segregation, leading to more uniform and durable cement structures. The anhydrous grade offers higher alkalinity for dry-blend systems, while the pentahydrate provides rapid solubility and ease of handling in liquid or wet-mix operations.

ANTIFOAM AGENTS / DEFOAMERS

Polysiloxane Defoamers

Polysiloxane Defoamers can be added to cement slurries to inhibit foam formation and destroy existing foam. They are readily dispersible, stable in high temperature and pH. Available in both powdered and liquid forms.

Polyether Defoamers

Polyether Defoamers are non-toxic, non-ionic, and silicone-free defoamers that requires low loading and good compatibility with other additives for cement slurries.

Triisobutyl phosphate/Tributyl phosphate (TIBP/TBP)

Triisobutyl phosphate / Tributyl phosphate (TIBP/TBP)can be added to slurries to both inhibit foam formation and destroy existing foam. Both TIBP/TBP supplied in liquid concentrations. Aluminium stearate is used specifically as a defoamer in water-based drilling fluids. It provides transparency, stringiness, and water repellency, and resists high temperatures improving foam control and slurry measurement accuracy.

CEMENT

Calcium Aluminate Cements (CACs)

Calcium aluminate cements (CACs) can be used as an additive or as the standalone cement in slurries as they impart higher overall compressive strengths, high early- strengths and biogenic corrosion resistance. We offer a full range of CACs (40-80% Al2O3).

Calcium Sulfo Aluminate Cements (CSAs)

The Calcium Sulfo Aluminate Cement (CSA) range incorporates various hydraulic cements, cement binders and pre-formulated products for making rapid setting and high early strength in cement slurries.

CORROSION INHIBITORS

ATMP
Amino trim ethylene phosphonic acid (ATMP powder) is used as a corrosion inhibitor in oil and gas well cementing systems due to its ability to minimize scale growth and inhibit metal oxidation.

Calcium Nitrite
Calcium nitrite provides corrosion inhibiting and accelerating properties for cement slurries.
Available in 92/94% powder and a 30/35% solution.

DISPERSANTS

Acetone Formaldehyde Sulfite / Sulfonated

Acetone Formaldehyde (AFS/SAF)
Acetone Formaldehyde Sulfite / Sulfonated Acetone Formaldehyde (AFS/SAF) is a highly effective dispersant that improves flow properties and reduces the viscosity of cement slurries without the need for additional water and extended setting time. Ideal for use in high salt conditions.

2-Acryl-amido-2-methyl-propane Sulfonic Acid (AMPS)
AMPS (2-acryl-amido-2-methyl-propane sulfonic acid) monomers and AMPS polymers are dispersants that improve flow properties of cement slurries while increasing the fluid loss / gas migration properties in strength of the cement. We supply a range of AMPS based powders and solutions.

Melamine Formaldehyde Sulfonate
Melamine formaldehyde sulfonate is a polymer effective as a dispersant in cement slurries, improving fluidity and workability while reducing water content.

Polycarboxylate ethers (PCE)
Polycarboxylate ethers(PCE) offer superior dispersing power and regulate fluidity and rheological properties of cement slurries. PCE molecules adsorb onto cement and evoke electrostatic and steric repulsive forces to mitigate agglomeration of fine particles.

Naphthalene Sulfonate
With excellent dispersing and wetting properties, naphthalene sulfonates have been a workhorse in of the building industry. Highly effective dispersant in slurries to improve the flow properties of the slurry, while reducing hydraulic horsepower requirements. Available as both a calcium and sodium salt, with a variety of sulfate grades available. Formaldehyde free grades are also available.

EXPANSION ADDITIVES

Calcium Oxide
Calcium oxide is used as an expansive additive in cement slurries to ensure zonal isolation and excellent bonding between the cement and the casing at low temperatures.

DB Dolomite
DB Dolomite Calcium oxide is used as an expansive additive in cement slurries to ensure zonal isolation and excellent bonding between the cement and the casing, while improving early strength developments and reduced gel strength times.

Dead Burnt Magnesium Oxide Magnesite
Dead burnt magnesite is used as a post set expansive additive in cement slurries to ensure zonal isolation and excellent bonding between the cement and the casing. It is ideal for use in temperatures above 85 °C. Various grades to meet your desired specifications.

COMPLETION AND WORKOVER FLUIDS

Zinc Bromide
Zinc Bromide is a high-density clear brine widely used in oilfield completion and workover fluids. It delivers densities above 2.3 g/cm^3 without solids, ensuring wellbore stability while minimizing formation damage. Supplied in both liquid and solid grades, it offers flexibility for field brine preparation and reliable performance in critical high-pressure applications.

CLEANING & MAINTENANCE CHEMICALS

Sulfamic Acid
High-purity inorganic acid used for descaling, equipment cleaning, and maintenance applications in oil & gas systems. Effective for removal of mineral deposits, scale buildup, and process contaminants in industrial equipment and water handling systems.

EXTENDERS

Aluminum Powder and Paste
Aluminum powder help provide with expansion and gas migration control by generating small hydrogen gas bubbles. It can also increase the strength to density ratio of the cement. Available in a wide range of particle sizes of aluminum powder.

Attapulgite
Attapulgite, also known as palygorskite, can be used to reduce the overall density and thicken / viscosify. It serves as a more effective extender than bentonite in seawater or high-salt systems.

Bentonite
Bentonite isa colloidal clay mineral that can be used to thicken, reduce the specific gravity and reduce overall fluid loss. Bentonite can be used with other mineral based additives for optimal performance.

Microspheres - MICRO™ (CM) Ceramic Microspheres
MICRO™ (CM) Ceramic Microspheres also known as “Cenospheres”, are thin-walled hollow ceramic spheres that can be used to modify rheology, reduce weight and shrinkage and improve thermal insulation of cement. We offer a range of ceramic microspheres for modifying rheology and improving thermal insulation.

Glass Spheres - MICRO™ (EFGS)
MICRO™ (EFGS) Expanded Foam Glass Spheres are ideally suited for lightweight cement systems. This lightweight aggregate is made from recycled glass and provides a chemically resistant, low density, resistant to pressure a thermal insulation additive. Also highly suited for use in construction - insulation, fireproofing and cement board.

Blast Furnace Slag
Blast furnace slag is used to produce lightweight cement and decrease permeability of cement.

Calcium Sulfate Hemihydrate
Calcium sulfate hemihydrate can be used as an extender in cement and has gas migration benefits. Various grades available to meet your desired specifications.

Expanded Clay Spheres
Expanded clay spheres are expanded spheres that have a honeycomb-shaped micro-structure, decreasing density and increasing buoyancy of a cement, increasing the cement’s cost effectiveness and strength to density ratio.

Expanded Perlite
Expanded perlite is a porous volcanic glass containing entrained air that is used to reduce the specific gravity of an oil and gas well cementing system. It requires a bentonite and a large amount of water to be added to the cement slurry, otherwise the expanded perlite will separate and float to the surface.

Fly Ash (Class F) - F-ASH™
F-ASH™ is used to enhance cement workability and durability, reducing heat of hydration and water demand in oil and gas well cementing to help control thermal cracking and drying shrinkage as well as geopolymers.

Gilsonite
Gilsonite can be used to form high-strength, low-density cement and is a cost-effective solution for lost circulation. Gilsonite can be used with bentonite to improve cement performance. Various grades of gilsonite available.

Glass Bubbles
Glass bubbles are low density hollow glass microspheres that have a high strength-to-density ratio, decreasing density and increasing buoyancy of a material making it a cost effective and water-resistant additive. It can be used as an additive to lightweight oil and gas well cementing systems as it reduces slurry density whilst maintaining workability and strength.

Metakaolin - MICROPOZZ™
MICROPOZZ™ Metakaolin is a pozzolan that is used as an admixture in oil and gas well cementing systems. Its benefits include lowering cement porosity, increasing long-term strength and improved corrosion resistance, especially at high temperatures (150 °C and above). Ideal for use in low density wells, deep hot wells, and acid rich wells and geothermal wells.

Rice Husk Ash
Rice husk ash isa pozzolan suitable for use in oil and gas well cementing systems as it reduces permeability, increases final strengths and general durability.

Silica Fume
Silica Fume increases cement compressive strength, reduces permeability, and can impart thixotropic properties. Available in both “densified” and “undensified” silica fume.

FLUID LOSS CONTROL ADDITIVES

AMPS Polymer Powder

AMPS polymer powders can be used to modify the flow properties of cementing systems and to control fluid loss and gas migration by reducing the permeability of the cement.

Super Absorbent Polymers (SAPs)

Super absorbent polymers (SAPs) such as sodium polyacrylate can be used to modify the flow properties of the cement and to control fluid loss, thus decreasing the permeability of the cement.

Cellulose Ethers - METHOD™

METHOD™ cellulose ethers, even in low doses, modify cement flow and control fluid loss, while providing viscosity and suspension stability in low-density slurries. We offer a full range of CHMECs, CMCs, MCs, HECs and HPMCs.

Poly Vinyl Alcohol (PVA)

Poly Vinyl Alcohol (PVA) powder is a non-retarding low temperature fluid loss/gas migration additive in light weight cement slurries that improves adhesion, flexural strength, workability and water retention of the cementing system. PVAs that are easily dispersed in water and form stable emulsions.

LOSS CIRCULATION ADDITIVES

Polyacrylonitrile (PAN) Acrylic LCM Fibers

POLYACRYLON™
Polyacrylonitrile(PAN) Acrylic LCM Fibers effectively seal formation fractures and bond with the cement to increase mechanical properties (tensile strength, flexural modulus and stabilization), all while having minimal to no effect on the flow properties of the cement slurry.

Polypropylene(PP)Fibers - POLYACRYLON™

Polypropylene Fibers effectively help seal formation fractures while having minimal to no effect on the flow properties of the cement slurry. We offer a wide range of PP fibers.

E-Glass Chopped Strand Fibers

E-Glass Chopped Strand Fibers effectively help seal formation fractures while having minimal to no effect on the flow properties of the cement slurry. E-Glass Chopped Strand Fibers have a significant effect on reducing the porosity and the permeability of the base cement.

RETARDERS

Cellulose Derivatives - METHOD™

METHOD™ Cellulose derivatives such as HEC, CMHEC, CMC, MC can be used as set retarders and free water control agents in oil and gas well cementing systems. Other cellulose derivatives upon request.

Hydroxycarboxylic Acids - Citric, Tartaric, and Sodium Potassium Tartrate

Hydroxycarboxylic acids are used as retarder enhancers to improve rheological properties and reduce the set times and viscosity of cement without the need for additional water. We offer the following:

Citric acid (Powder and Liquid)

Tartaric acid

Sodium potassium tartrate

Lignosulfonates - LIGNOSIL™

LIGNOSIL™ Lignosulfonates are used to reduce the set time in cement and also helps increase the overall compressive strength of cement.

Phosphonate Retarders

We offer a range of powder phosphonate retarders, including ATMP, which improve flow and workability upon addition of low concentrations. Phosphonate retarders also perform well at high temperatures and increase concrete strength.

Sodium Potassium Tartrate

Sodium potassium tartrate can be used as an extremely strong cement retarding agent in oil and gas well Portland cement-based systems. Typically used in CSA cement systems as a retarder.

DRILLING FLUID ADDITIVES

Sodium Bentonite API 13A

Premium grade sodium bentonite designed for drilling fluid systems requiring excellent viscosity, suspension, and filtration control performance. Commonly used in oil & gas drilling, civil engineering, piling, and trenchless drilling applications to improve borehole stability, hole cleaning, and fluid loss control.

VISCOSIFYING AGENTS

Xanthan Gum and Welan Gum

Xanthan gum and Welan Gum can be used to modify the viscosity and suspension properties of cement.

Diutan Gum

Diutan Gum is a microbial polysaccharide designed to deliver stable viscosity in oilfield drilling and completion fluids. It maintains rheological properties under high temperature, high salinity, and high-pressure conditions where conventional gums fail. Its performance helps improve suspension, cuttings transport, and wellbore stability in critical operations

WEIGHTING MATERIALS

Hematite

Hematite is used as a weighting material to increase the cement slurry density due to its high specific gravity (4.9 - 5.3). Hematite's fine particle size reduces abrasion on equipment and increases the compressive strength of cement more than most other weighting materials.

Ilmenite

Ilmenite increases the cement slurry density due to its high specific gravity (4.5 - 5). Ilmenite with a fine particle size prevents abrasion on equipment, minimizes solid segregation while maintaining above the acceptable cement strength for deep well operations.

Hausmannite (Manganese Oxide)

Hausmannite (Manganese Oxide)is increasingly being used in oil and gas well cement systems as a weighting material due to its unique properties. Hausmannite's fine particle size allows it to integrate into the cement matrix, displace entrained water, and create a lower-viscosity, more stable slurry.

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