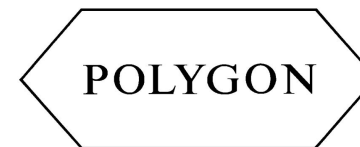


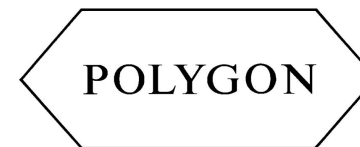
Products of POLYGON CHEMICAL LTD.



Corrosion inhibitors

The product list is not complete. The statements made do not dispense the reader from verifying them.

Product names	Application	Properties
CYCLOMIN 18-OH	Good corrosion inhibitor for iron and steel in acidic conditions (e.g. hydrochloric acid) and particularly in oil-containing formulations.	Cleaning and emulsifying, soluble in various apolar organic solvents, oils, fats. Water repellent and dewatering properties. Suitable for motor cleaners and corrosion inhibitors as well as drying aid in automated vehicle-washing and painting lines. Low-foaming.
POLYGON PC 1234	Corrosion inhibitor in powder form for iron and steel in acidic cleaners and for aluminium in alkaline cleaners.	No surface-active properties, compatible with amphoteric, anionic and cationic surfactants, in acidic environment also with cationic surfactants.
POLYGON PC 1747	Corrosion inhibitor for iron and steel for alkaline cleaners in powder form.	Protects silver in automated dish washing.
POLYGON PC 1826	Corrosion inhibitor in aqueous alkaline formulations for ferrous metals and steel	Limited solubility in water (turbidity). Soluble in glycols, isopropyl alcohol, and alcohol-water-blends. Soluble in alkaline/aqueous formulations. Corrosion inhibitor for metal-working fluids, pickling baths in metal pretreatment, adhesion promoter in paints and lacquers, curing agent in acid curing coatings.
POLYGON PC 1873	Amine-free corrosion inhibitor for iron, steel, non-ferrous metals and particularly zinc. Suppresses the formation of white rust (ZnCO ₃) in alkaline conditions (pH 9-11)	Free of mineral oils, nitrite, p-tert-butyl benzoic acid (PTBBA) as well any kind of amines. Low-foam, not sensitive to hard water. Prolongs life of water mixed cooling lubricants, grinding solutions, aqueous hydraulic liquids, and cooling water systems.
POLYGON PCG 1201	Corrosion inhibitor particularly for iron, steel and non-ferrous metals, also aluminium, in acidic conditions (pH 1-6)	Good wetting and cleaning properties, fast releasing; disperses calcium soap well. For aqueous, alkaline and acidic cleaners, cooling lubricants in metal treatment, mass finishing media, fast releasing cold cleaners.
POLYGON PCG 1206	Corrosion inhibitor for aluminium in acidic conditions (pH 2-6)	For inorganic acids such as hydrochloric acid, phosphoric acid, sulfuric acid, and amidosulfonic acid. Not suitable for formulations and solutions containing nitric acid. Protects aluminium in acidic and alkaline conditions.



Corrosion inhibitors

The product list is not complete. The statements made do not dispense the reader from verifying them.

Product names	Application	Properties
POLYGON PCG 1207	Corrosion inhibitor to protect iron and steel against strong acids.	Recommended as additive in aqueous solutions to remove rust, scales, and calcium carbonate incrustations. Suitable for inorganic and organic acid and blends thereof.
POLYGON PCG 1209	Corrosion inhibitor for iron, steel, non-ferrous metals, and aluminium in neutral and alkaline conditions (pH 8-13)	Particularly suitable for cooling lubricants and hydraulic fluids. As well as corrosion inhibitor for cooling water circuit, rust inhibitor for testing fluids; protects against precipitation; corrosion protection in water treatment. Stabilises active oxygen; bleach stabiliser and activator. Low dosage.
POLYGON PCG 1216	Corrosion inhibitor for iron, steel, and non-ferrous metals in neutral and alkaline media.	Particularly recommended to protect against atmospheric corrosion. For car care products, I+I cleaners, cooling lubricants in metal working, mass finishing media, aqueous test fluids.
POLYGON PCG 1417	Corrosion inhibitor for iron and steel in acidic conditions (pH 1-6), particularly for solutions containing sulphuric acid and when formation of sulfides possible.	For descaling of washing machines, automatic dishwashers, coffee machines, and boilers.
POLYGON PCG 1418	Corrosion inhibitor for iron and steel in acidic conditions, particularly in hydrochloric solutions and when formations of sulfides possible.	For descaling of washing machines, automatic dishwashers, coffee machines, and boilers.
POLYGON PCG 1419	Corrosion inhibitor for aluminium and light metal alloys with magnesium in alkaline conditions (pH 8-12), particularly in the presence of chelating agents such as NTA	Even at low dosage good inhibition properties. Inhibits even at the presence of chelating agents such as NTA or citric acid.
POLYGON PCG 1422	Corrosion inhibition for multi-metal systems in alkaline conditions.	Corrosion inhibitor for aqueous metal cleaners, automotive and workfloor cleaners, hydraulic fluids, passivating agents, mass finishing media, aqueous testing fluids. Corrosion protection in aqueous paints, dispersions, emulsions and aqueous/glycolic cooling systems.
POLYGON PCG 1426	Corrosion inhibitor particularly for iron, steel and non-ferrous metals, also aluminium, in alkaline conditions (pH 8 - 12)	Excellent storage stability, needs solubiliser, low-foaming.

Corrosion inhibitors

The product list is not complete. The statements made do not dispense the reader from verifying them.

Product names	Application	Properties
POLYGON PCG 1661	Corrosion inhibitor for iron, steel and non-ferrous metals (e.g. bronze, copper, tin-plated copper and galvanized plastic), in acidic conditions (pH 1-6)	Clear as water, readily water-soluble, low-foaming, protecting against organic and inorganic acids such as hydrochloric acid, phosphoric acid, amidosulfonic acid, formic acid, acetic acid, citric acid, lactic acid. For colourless, acidic sanitary cleaner, professional household cleaners, rim cleaner, dairy cleaners. Excellent protection of fittings.
POLYGON PCG 1831	Corrosion inhibitor particularly for iron, steel and non-ferrous metals, also aluminium, in alkaline conditions (pH 9 - 11)	Excellent storage stability, foam reduced, soluble in water without solubiliser. Corrosion inhibitor for tin-plated cans, water miscible cooling lubricants, grinding solutions, alkaline industrial cleaners, aqueous hydraulic fluids.
POLYGON PCG 1896	Corrosion inhibitor for iron, steel and non-ferrous metals (even bronze and brass) and galvanized plastic as well in acidic conditions (pH 1-6)	Good solubility in water, low-foam, clear as water. Protects in organic and organic acids such as hydrochloric acid, phosphoric acid, amidosulfonic acid, methanesulfonic acid, formic acid, acetic acid, citric acid, lactic acid. Used in colourless acidic sanitary cleaners, professional household cleaners, rim cleaners and dairy cleaners.
POLYGON PCG 1909	Corrosion inhibitor for iron, steel and non-ferrous metals in acidic, non-oxidative media.	Not only for ordinary mineral acids, but methanesulfonic acids and acid blends as well.
POLYGON PCG 1923	Corrosion inhibitor for iron, steel and non-ferrous metals in acidic non-oxidative media. Excellent ecobalance.	Not only for usual mineral acids, but methanesulfonic acids and acid blends as well. Protects even steel well against hydrochloric acid.
POLYGON PCG 1936	Improves wetting of iron and non-ferrous metals when degreasing by hydrocarbon-based solvents. Leaves a protective layer against rust. Can be used as rust inhibitor in fuel, kerosene, solvents in tank farms, pipes and tankers. Protects in fresh and salt water.	Used in metal working fluids, cooling lubricants, greases, grinding oils, mass finishing media and dewatering fluids. Cationic component for paint coagulation.

Corrosion inhibitors

The product list is not complete. The statements made do not dispense the reader from verifying them.

Product names	Application	Properties
POLYGON PCG 1939	Corrosion protection particularly for iron, steel and copper with rust dissolving and dewatering properties. Good stability.	Corrosion inhibitor for metal-working fluids, cooling lubricants, slushing oils and mass finishing media as well as rust inhibitor in petrol, jet fuel, solvents in tank farms, pipelines and tankers. Improves drying of metals after cleaning in water by its dewatering effect.
POLYGON PCG 1952	Improves wetting of ferrous and non-ferrous metals in hydrocarbonic solvents during solvent degreasing; leaves a protective film against rust.	Rust inhibitor in petrol, jet fuel, solvents in tank farms, pipelines and tankers in the presence of fresh and salt water.
POLYGON PCG 1953	Corrosion inhibitor for aluminium and ferrous metals in alkaline cleaners.	No foam. Can be combined with amines, phosphates and boric salts.
POLYGON PCG 1969	Corrosion inhibitor and brightener for aluminium in neutral and alkaline aqueous solutions.	E.g. for alkaline remover of polishing paste on the basis of borate, phosphates, and carbonate and in alkaline pickling baths.
POLYGON PCG 2037	Corrosion inhibitor for iron, steel, and non-ferrous metals in acidic, non-oxidative media. Excels by its good eco-balance. Foam reduced.	Effective not only in usual mineral acids, but also in methanesulfonic acids and blends of various acids. Protects even steel well against hydrochloric acid.
POLYGON PCG 2055 new	Aqueous corrosion inhibitor for iron and steel at pH 9-11	Foam reduced. Free of mineral oils, nitrite, PTBB (p-tert.-butylbenzoic acid) and secondary amines.
TENSAN TEM	Corrosion inhibitor for iron, steel and copper in acidic conditions, as potassium, amine or sodium salt for aluminium in alkaline conditions. Available as granules, too.	No surface-active properties. Good solubility in water. Strongly acidic. Corrosion inhibitor for descalers, acidic rust removers, ultrasonic bath cleaners.
TENSAN TEO	Anion-active, nitrogen-free corrosion inhibitor for iron, steel and non-ferrous metals. Also solubiliser and enhancing the detergency power in cleaners, efficient at any pH.	Low-foaming, very good dispersing and emulsifying properties, strongly acidic, good solubility in alkaline conditions, antistatic, good cleaning and wetting properties. Antistatic agent for textiles.