

Odourlock® provides the following benefits:

- Odour control Odourlock® precipitates dissolved sulphides, preventing the release of H₂S from wastewater streams to air.
- Corrosion prevention Odourlock® use prevents corrosion – as reducing H₂S levels lowers the potential for biological conversion to Sulphuric Acid, this ensures your equipment lasts longer.
- Odourlock® reacts quickly The reaction time of Odourlock® dosing is effectively instantaneous. This is important in applications with limited residence time between the dosing location and the first odour release point.
- Phosphorous removal Odourlock® will also react with dissolved phosphorous to form a precipitate, achieving reduction in dissolved phosphate levels. This can be beneficial for the downstream wastewater treatment processes, improving quality of treated wastewater for discharge.
- Lower Struvite formation potential Struvite forms in the presence of Magnesium, Ammonia and Phosphorous. As Odourlock® dosing removes phosphorous (P), it will actively reduce the potential for Struvite formation.
- Operational benefits Odourlock® is easy to handle as it does not settle out. This means that less maintenance and tank clean outs are required than alternative chemicals.
- Lower ongoing chemical cost Odourlock® is typically more cost effective than other alternative chemicals due to its lower \$ per tonne cost and the lower dose rate in typical sewage conditions.

Odourlock® is a high strength low acid ferrous chloride solution.

Ixom has been supporting customers to solve their odour and corrosion challenges with Odourlock® dosing for over 20 years.

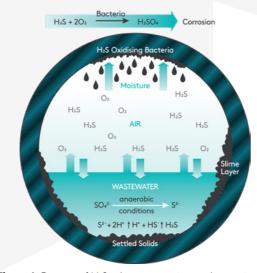


Figure 1: Process of H₂S odour generation and corrosion in sewers.

Odourlock® works through a precipitation reaction with dissolved sulphides present in the wastewater and thereby 'locking them up'. This prevents their release as an odorous gas and the formation of acidic compounds which can cause corrosion.

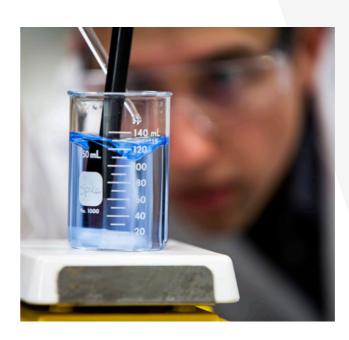
$HS^{-}/S^{2-}_{(gg)} + Fe^{3+}/Fe^{2+} -> Fe_2S_{3(S)}/FeS_{(g)} + H^{+}_{(gg)}$

Odourlock® is more effective when most of the dissolved sulphide is present as HS-, this is achieved at pH values above 6.8. It is easy to visually check that the Odourlock® is working as the precipitated sulphides show a characteristic black (FeS) colour.

What's your challenge?

Ixom has a wide range of capabilities to ensure we can meet your challenge.

- All the chemicals you need for water and wastewater treatment in one place.
- Stock management made easy with Ixom monitored telemetry.
- · Advice for selecting and implementing the right solution from Ixom's experienced team of scientists, engineers and technical specialists.
- Practical, customised and innovative engineering solutions from Ixom's Water Treatment Services team.
- Support when you need it on 1800 033 111 with 24/7 Ixom Emergency Response Service.
- Quality product manufactured and distributed according with ISO 9001 approved quality processes.



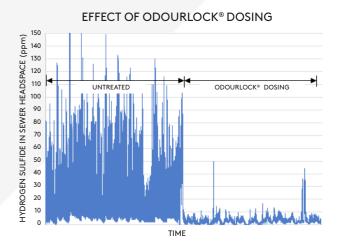


Figure 2: Results from ODOURLOCK® trial for hydrogen sulphide control in network application.

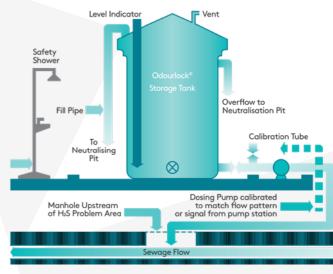


Figure 3: Dosing ODOURLOCK® from a bulk installation to a manhole to eliminate sulphide problems.

Water utilities and manufacturers are facing new challenges:

- Closer residential development Neighbours are
- Increased cost focus Need to protect equipment and infrastructure to reduce significant costs
- Environmental compliance increasing regulation
- Innovative solutions need to be found to ensure continued success

At Ixom we thrive on solving our customers' challenges and have a range of solutions to meet any need

that is used to reduce the emission of harmful odours associated with H₂S in water streams and prevent the associated corrosion.

















Solving Your Challenges for Generations

2015 - Beyond



201

Ixom separates from Orica as a stand-alone company and remains a market leader in water treatment and chemical distribution in Australia and New Zealand, with a growing presence in Latin America and Asia.

2000s - 2015



2008

Chemnet, Watercare and Chlor Alkali businesses merge to form Chemicals Group



2005

Chemnet's specialty distribution business expands with acquisition of Keith Harris Flavours and Fragrances Watercare and Speciality Services businesses acquire Aluminates Chemical Industries

2001

Orica Watercare Inc. incorporated in USA

1970s - 1990



1997-98

ICI divests ICI Australia shareholding and the independent ICI Australia becomes Orica

1997

Odourlock® is first used in Australia to solve wastewater odour and corrosion challenges

1988

Watercare Division established

1971

ICIANZ becomes ICI Australia

1920s

1928

Imperial Chemical Industries of Australia and New Zealand (ICIANZ) registered

What's your challenge?



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