

# Genesys LF

## Broad Spectrum Antiscalant and Antifoulant

Genesys LF is a general purpose liquid antiscalant & antifoulant for use in Reverse Osmosis and Nano-filtration systems. This concentrated phosphonate product is effective against a wide range of inorganic scaling species and also sequesters trivalent metal cations such as iron, manganese and aluminium thus reducing the frequency of membrane replacement and cleaning.

Genesys LF has proven to be effective at a Langelier Saturation Index (LSI) of +2.6 which means that systems can be designed and operated at their optimum recovery rates.

By reducing the amount of feed water used and concentrate to be discharged, significant savings can be made to both capital and operational costs.

### Application

Genesys LF should be dosed continuously to the feed water upstream of the cartridge filters. Typical dosage rates are 2 – 4 mg/L.

Genesys LF may also be used in sea water applications where iron is present, recycle of brine is in use or there is no feed water pH reduction by acid dosing.

Typical dose rates are 0.5 – 1.0 mg/L

Under NSF listing the Genesys LF dose rate in the feed water should be less than 5 mg/L in potable water systems. The optimum dosage rate can be calculated using the Genesys Membrane Master® software.

Genesys LF can be diluted and is fully miscible with water in all proportions.

### Health and Safety

Genesys LF is an aqueous solution of neutralised phosphonic acid. It has been approved for use in potable water applications and does not contribute to assimilable organic carbon (AOC), which can act as source of nutrient for micro-organisms. Genesys LF is compatible with carbon steel and other commonly used materials of construction. Observe all safety precautions shown in the material safety data sheet, available on request.

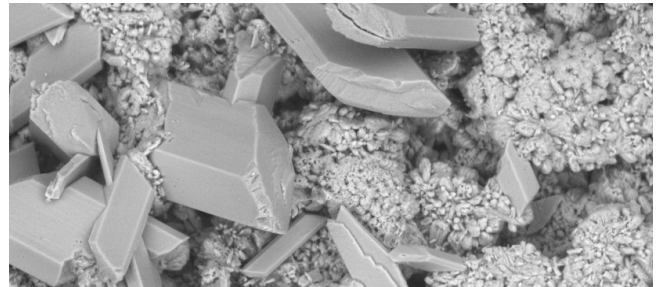
### Packaging

Available in 25 kg kegs, 250 kg drums and 1,300 kg IBCs.

The 'shelf life' is 2 years under normal storage conditions.

### Typical properties

Appearance: straw coloured liquid  
pH as supplied: 9.8 - 10.2  
Specific gravity: 1.34 - 1.37  
Freezing point: < -15°C



Inhibits Scale Formation



Prevents Iron Fouling

- ✓ Suitable for Reverse Osmosis (RO) and Nano-Filtration (NF) membranes
- ✓ Effective at LSI up to +2.6
- ✓ Excellent inhibitor for iron fouling
- ✓ Excellent silica antiscalant
- ✓ NSF listed product
- ✓ Approved for use in drinking water applications (UKDWI)
- ✓ Compatible with all types of polyamide membrane
- ✓ Replaces acid addition
- ✓ Inhibits common scales
  - Calcium carbonate/sulphate
  - Calcium phosphate
  - Barium/Strontium sulphate
  - Silica
  - Iron/Manganese

The information provided in this data sheet is believed to be true and accurate.

Genesys International Ltd. accepts no product liability as the use of its products are outside the company's control.