

# Genesys MG

## Magnesium Hydroxide Antiscalant

Genesys MG has been developed as an antiscalant for use in Reverse Osmosis and Nano-Filtration systems with waters having a high magnesium content but is effective against calcium carbonate too. Magnesium hydroxide fouling is not normally a problem in membrane systems because operating pH and temperatures are usually outside the levels where magnesium hydroxide forms. However new applications, involving pH correction to enhance the rejection of boron, are becoming more commonplace and Genesys MG has been developed specifically for use in this technology. Genesys MG is particularly effective in second pass recovery systems working at 80-90% recovery with an adjusted feed pH of 10.0–10.5.

### Application

Genesys MG should be dosed continuously to the feed water upstream of the high pressure pumping system, or cartridge filters, if used. Typical dosage rates are 2 - 4mg/L.

Genesys International Staff will be pleased to provide advice on the most suitable dose rate for a particular water analysis. Genesys MG can be diluted and is fully miscible with water in all proportions.

### Health and Safety

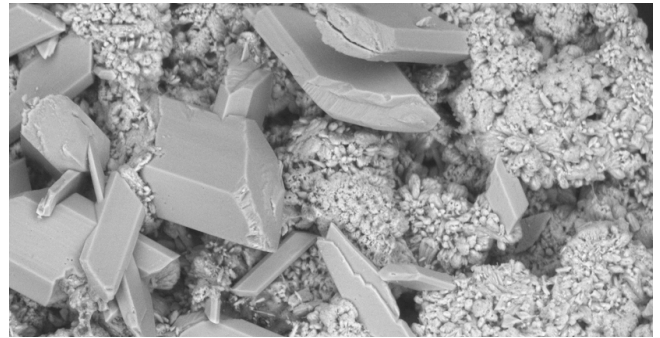
Genesys MG is a non-hazardous, synergistic blend of phosphonates and carboxylic acids that are compatible with carbon steel and commonly used materials of construction. Observe all safety precautions shown in the material safety data sheet, available on request.

### Packaging

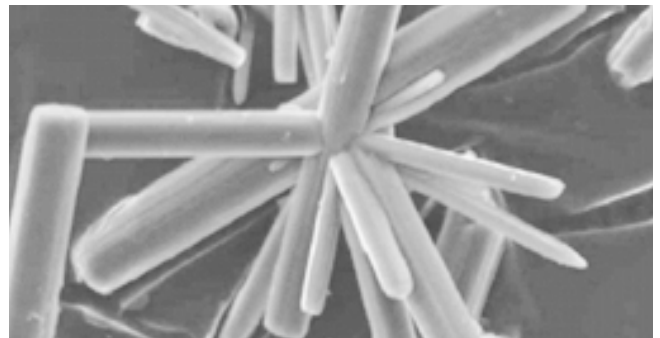
Available in 25 kg kegs, 250 kg drums and 1,300 kg IBCs. The 'shelf life' is 2 years under normal storage conditions.

### Typical properties

Appearance: amber liquid  
pH as supplied: 8.0 – 8.5  
Specific gravity: 1.24 – 1.26  
Freezing point: -2°C



Inhibits Scale Formation



2nd Pass RO systems – boron rejection

- ✓ Suitable for Reverse Osmosis (RO) and Nano-Filtration (NF) membranes
- ✓ Allows high recovery rates at elevated pH levels in second pass recovery systems
- ✓ Compatible with all polyamide membranes
- ✓ Approved for use in drinking water applications (UKDWI)
- ✓ 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.