

# Genesys PHO

## Calcium Phosphate Antiscalant

Genesys PHO has been developed specifically to prevent calcium phosphate and calcium carbonate scaling in Reverse Osmosis and Nano-Filtration systems.

Genesys PHO permits system operation at higher pH and recovery than other antiscalants; thus reducing the amount of feed water, reject water disposal and acid for pH control needed, resulting in significant capital and operational cost savings.

### Application

Genesys PHO should be dosed continuously to the feed water upstream of the cartridge filter.

The dose rate of Genesys PHO is dependent on the calcium and phosphate content of the concentrate stream, as well as pH, temperature and ionic strength. Genesys staff will be pleased to provide advice on the most suitable dose rate for a particular water analysis and set of operating conditions. Genesys PHO can be diluted and is fully miscible with water in all proportions.

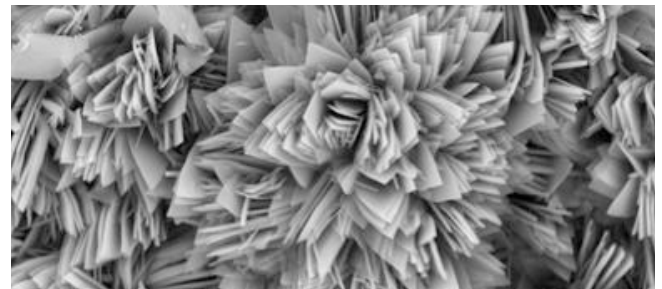
### Health and Safety

Genesys PHO is a non-hazardous, synergistic blend of phosphonates and carboxylic acids, 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.

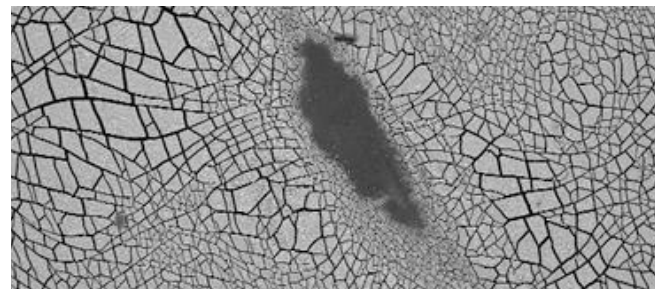
### Packaging

Available in 25 kg kegs, 240 kg drums and 1,200 kg IBCs.

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



Hydroxyapatite crystal form



Amorphous Calcium Phosphate on Membrane surface

- ✓ Suitable for Reverse Osmosis (RO) and Nano-Filtration (NF) membranes
- ✓ Replaces acid addition
- ✓ Compatible with all types of polyamide membranes
- ✓ Allows high recovery rates
- ✓ Simple Test Method
- ✓ Inhibits common scales
  - Calcium carbonate/sulphate
  - Barium/Strontium sulphate
  - Calcium phosphate
  - Silica

### Typical properties

Appearance: pale clear liquid  
pH as supplied: 6.0 – 6.4  
Specific gravity: 1.14 – 1.16

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.