



## CalPhos Polyphosphate Scale Inhibitor Specification



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# CalPhos Polyphosphate Scale Inhibitor

#### How CalPhos works...

Water passes through calibrated nozzles in a venturi system, creating a suction of polyphosphates and water solution from the bowl. a proportional dose is then delivered through into the water system. Inside the unit, a bellows constantly sucks in the saturated solution, preventing the calcium in the water from crystallising and forming a hard encrustation on pipes, boilers, showerheads, taps, washing machines and dishwashers, etc.



Connect the unit to the main water supply in the way illustrated in the installation diagram below (polyphosphate blocks available separately).

#### Operation...

The pressure of the water flowing into the unit must not be lower than 1.0 bar and no more than 7 bar. The unit will only operate correctly if these conditions are fulfilled. operations are guaranteed by use of a venturi suction system that ensures that the water

passes correctly through calibrated nozzles. The water that is delivered into the feeding bowl, enables the correct dose of polyphosphate in the bowl, to be delivered in full compliance with current regulations. Inside the CalPhos bowl, there is a bellows that constantly sucks in the saturated solution.





### Specification...

height:	150mm
Width:	60mm (excluding fittings)
Depth:	110mm
Cartridge replacement:	CalPhos R
Maximum working pressure:	7 Bar
Minimum working pressure:	1 Bar
Maximum temperature:	40°C
Maximum flow rate:	30 litres/Min.
Inlet & outlet fittings:	2 x 15mm connections
Pressure loss:	0.2 bar

#### Installation Tips...

100% food grade polyphosphate - safe for drinking water use. The CalPhos unit consists of:

- a. adjustable rear connection in chrome plated brass.
- b. Fixing ring nut to separate bowl and main body.
- c. Polyphosphate that is suitable for use with foodstuffs.
- d. Polyphosphate in cartridge form added to the bowl in the way described below:
- CalPhos has a unique head fitted with a tap that allows the flow

of the water into the bowl to be interrupted and which

enables the bowl to be disassembled when required without

the need for interrupting your mains water supply.

#### Maintenance...

The bowl should be removed once every three to six months and carefully washed in hot water in order to eliminate any encrustations that may have formed. The correct level of polyphosphate should be maintained and should never be allowed to fall below the minimum level. The bowl must be in an upright position.

#### Note: Dosing Rate Calculation

Based on national average of 120 litres per person per day.

1 x CalPhos R would use 0.6g per person per day ie, 1 person - cartridge would last 160 days

4 persons - cartridge would last 40



#### **Fitting instructions**

This unit fits 15mm copper pipe and must be installed with bowl in upright position.

- 1. Turn off water mains before installation.
- 2. screw in 2 x 15mm compression fittings onto head and seal using spanners.
- 3. Unscrew the fixing ring nut (7) on top of bowl and remove the bowl. Insert polyphosphate cartridge and reattach bowl to head making sure the 'o' ring is in place on bowl and tighten fixing ring.
- 4. Cut out on water pipe to install unit. Check measurement pior to cutting pipe.
- 5. Fit unit onto pipe and seal compression end with spanners.
- 5. Turn on mains water supply. Check for leaks.
- 6. Make sure the bypass handle is in a horizontal position and wait for bowl to fill with water. leave handle in this position until bowl needs to be removed, then turn through 90 degrees (water mains does not have to be turned off as the bowl is isolated with the handle vertical).
- 7. open the bleed screw (4) on the front of the unit to remove any air locks in the system and then close the bleed screw when complete.

#### Tools required

Copper pipe cutter or junior hacksaw. spanners.

Tape measure.

#### Instructions for replacing cartridge

- 1. Cut off a refill from the pack of 4.
- 2. Close the CalPhos water supply either at the mains or alternatively by closing the built-in bypass valve (2) on top of the unit.
- 3. Release any air from the unit by unscrewing the bleed screw (3).
- 4. Unscrew the fixing ring nut (7) and remove the bowl (8) from the unit.
- 5. Remove the exhausted cartridge and rinse out the bowl (8) and housing with warm water.
- 6. Remove the cap off the new cartridge refill and insert into the housing.
- 7. Fix the bowl (8) to the housing ensuring that care is taken and that the 'o' ring (5) is securely in position. Use the spanner to tighten but do not over-tighten.
- 8. open the built-in bypass valve (2) to let water in or open up the mains water supply.
- 9. Check for leaks.
- 10.open the bleed screw (4) on the front of the unit to remove any air locks in the system and then close the bleed screw when complete.



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