

Saving Water and Money with KalGUARD+

Despite the recent high rainfall, water is officially in short supply in many parts of the South and East of England. Hosepipe bans are the first steps with a risk of more severe water conservation controls to come. Sentinel Performance Solutions can help – if you live in a hard water area and use a water softener or need one for a new system, then KalGUARD is an alternative that does not waste water as part of the regeneration cycle and you will no longer need to buy expensive salt.

Drought risk and hard water areas

The current drought risk areas are geographically similar to the map of hard water areas in East Midlands, East Anglia, South & Eastern England.

KalGUARD is based on technology that is approved in the Building Regs Part L Domestic Building Services Compliance Guide for the treatment of hard water to prevent lime scale formation.

Why do salt based Water Softeners waste precious water?

Historically, water softeners have been used to control lime scale deposition. This is an example of a simplex salt regenerating softener unit and brine tank.

They require regular regeneration (often daily) to restore the capacity of the resin found inside the softener unit.

The regeneration process takes approx.90 mins and depending on resin bed capacity, a mid-sized commercial unit can easily use up to 1,000 litres (1m³) of water per regeneration. This water goes to the drain. It cannot be recycled or reused as grey water due to the very high salt content.



KalGUARD+



The solution to help minimise water usage and save on salt costs

KalGUARD has no requirement for regeneration and so it saves a valuable water resource and associated water and salt costs.

To quantify the monetary and environmental value, let's compare a 42mm KalGUARD with a mid-sized commercial softener which may regenerate daily.

Water saved could be 920 litres per day and with water currently costing around £2.50 per m³ (supply and sewerage) this amounts to annual water savings of 335,800 litres (335.8 m³) or £840 when a mid- sized KalGUARD is used.

Every Day Comparisons

Where 920 Litres is a typical amount of water used for daily regenerating a mid-sized salt based water softener, in volume terms this is the equivalent to 1,617 pints of beer or 15 baths taken or a staggering 202 gallons of petrol.

FACT 1

When used instead of a water softener, KalGUARD will reduce water usage and save £840 per year on the example above.

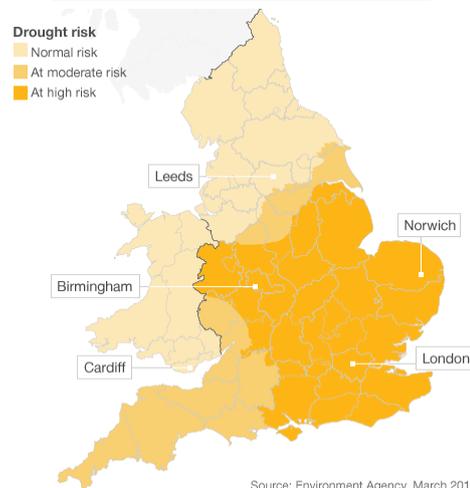
BUT it will also save approx. 4X that figure on salt costs...£3,398 per year.

FACT 2

If KalGUARD is used instead of or as a replacement for a salt regenerating water softener the ROI is often < 12 months.

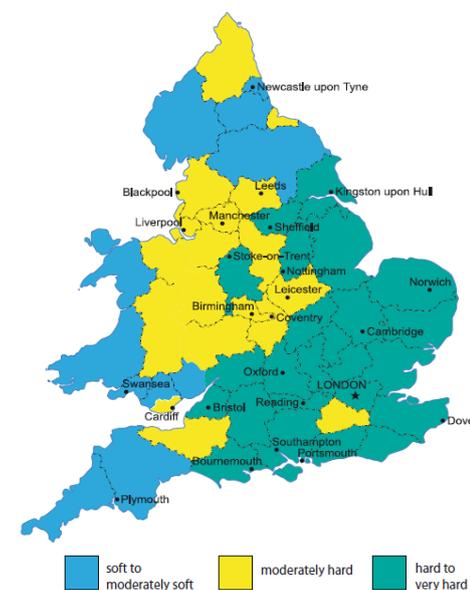
Water and salt savings commence on day 1 of KalGUARD operation.

MAP OF DROUGHT RISK AREAS



Source: Environment Agency, March 2012

MAP OF HARD WATER AREAS



For further information on KalGUARD and how it can make a difference for your business, please contact Stacey Killen at Sentinel Commercial 01928 583 281 or email stacey.killen@sentinel-solutions.net