

# A greener clean

## How we test



### Testing kettles

We harden water by adding calcium chloride and magnesium sulphate, and bubble air through it for several hours to help them dissolve. We half-fill seven identical kettles with some of the hardened water, then boil each 100 times, to cover the element in limescale. The water is changed after every five boils. We follow the instructions on how much product to use and how long to leave it for.

### Multi-surface cleaners

To test multi-surface cleaners, we cover nine identical stainless-steel trays with 500ml of hard water and bake in an oven at 175°C for three hours. We choose stainless steel as all the products are safe to use on it and will act only on the limescale not the surface. Once the trays cool, we repeat the process until each has been baked for 24 hours. The cleaners do not specify how much to use, so we spray on as much as is needed to cover the surface to be cleaned and leave it for the time manufacturers specify (between 30 seconds and five minutes) before wiping the tray with a damp cloth. We spray the same amount into a beaker and weigh it to check how much we used. This was 7.5 sprays or seven grams on average apart from Cillit Bang and Viakal where we had to use 20g (15 to 20 sprays).

Big names get squeezed out by citric products in our test



Viakal and Cillit Bang are the two most famous limescale removers, thanks to their TV ads. However, in our test these sprays

failed to match the performance of less well-known brands. We had to use more than twice as much of each to clean off limescale as well as our Best Buys.

The real winners in our tests were green cleaners. The two best-performing sprays, Antony Worrall Thompson's AWT Fresh and Green Bathroom Cleaner and Limescale Remover and Ecover's Ecological Limescale Remover, both use citric acid, also found in fruits such as lemon, as their active ingredient.

We look below at whether traditional cleaning solutions such as lemon and vinegar are effective limescale removers.

For this report we've tested sprays, liquids, gels and powders to tackle limescale around taps and showerheads, as well as kettle descalers.

All the products do the job, it's just that with some you have to use more of them, so they don't prove as good value.

We had to use more than twice as much Viakal and Cillit Bang to clean off limescale

## Traditional solutions

We've found vinegar great at descaling kettles (see *Which?*, January 2006, p57), but it does leave a smell. This will go away, though in our test there was a whiff of it after boiling and rinsing the kettle six times. Two of our Best Buy sprays use citric acid, so why not use a lemon instead? It can be



messy but is good for getting into the nooks and crannies in bathrooms and kitchens and is excellent for cleaning chrome taps.

One solution we had heard about, but wouldn't recommend, is to use a marble to knock off limescale inside a boiling kettle. We tried this in January 2006, but the marble got stuck in the element and smashed inside the kettle.

### 1 MULTI-PURPOSE SPRAY

**91% AWT Fresh and Green £1.99**

Celebrity chef Antony Worrall Thompson took the honours in our test with his Fresh and Green-branded product. It removed even the toughest limescale quickly and easily with just a wipe from a damp cloth. It's easy to use, has clear instructions and cost just 2p a use. It's available at [www.cleanandgreenuk.com](http://www.cleanandgreenuk.com).

Bottle size 500ml



### 2 MULTI-PURPOSE SPRAY

**89% Ecover Ecological Limescale Remover £2.99**

Ninety seconds after spraying this on to our test surface, we could wipe off almost all the baked-on limescale.

There's an easy-to-use trigger action and the plant-based fragrance will leave your surfaces smelling fresh. It cost just 3p a use which represents good value and is available at Waitrose.

Bottle size 500ml



### 3 MULTI-PURPOSE SPRAY

**79% Limelite Everyday All-Surface Spray £2.48**

The Limelite's trigger and nozzle make it very easy to use and the cleaner worked well to get rid of most of the limescale on our test surface quickly. It's good value for money at 2p a use. The instructions could be bigger and in clearer type. It's widely available on the high street.

Bottle size 500ml



## 10 KETTLE DESCALERS

## 82% Kettle Klear £1.95

This was best on test for cleaning kettles and produces little smell. The instructions are detailed and clear and two tablets will remove all limescale from your kettle in 30 minutes. That makes it slower than some of the other descalers on test but it's worth it for the result. It's important to rinse and reboil your kettle after descaling it. Kettle Klear is available at [www.greenshop.co.uk](http://www.greenshop.co.uk)

Size Six tablets



WHICH?  
BEST  
BUY

Two Kettle Klear tablets will remove all limescale from your kettle in 30 minutes

## What you should know

Limescale is a problem in hard-water areas

## TACKLING LIMESCALE

Limescale is a chalky deposit that occurs particularly in hard-water areas. It isn't dangerous but can damage a kettle if not treated and make tea taste nasty. Hard water is created where rain water passes through rocks like limestone or chalk and absorbs minerals. Calcium and magnesium salts are the minerals most commonly responsible. The south and east and parts of the West Midlands have hard water. Water is

softer in Cornwall, Devon, West Wales, North and West Yorkshire, Scotland and parts of Northern Ireland.

**SPRAYS** Some sprays are labelled multi-purpose or all surface, but this doesn't mean they can actually be used anywhere. Make sure you check the label and be wary of using on wood, enamel surfaces such as baths, or acid-sensitive materials such as gold, silver and copper.



MODEL	SPECIFICATION			WHICH? TEST PERFORMANCE			SCORE %
	PRICE (£)	COST PER USE (p)	TYPE	PERFORMANCE	EASE OF USE	VALUE FOR MONEY	
<b>MULTI-PURPOSE SPRAYS</b>							
1 <b>AWT</b> Fresh and Green Bathroom Cleaner and Limescale Remover	1.99	2	Spray liquid	★★★★★	★★★★★	★★★★	91
2 <b>ECOVER</b> Ecological Limescale Remover	2.99	3	Spray liquid	★★★★★	★★★★★	★★★★	89
3 <b>LIMELITE</b> Everyday All-Surface Spray	2.48	2	Spray liquid	★★★★	★★★★★	★★★★	79
4 <b>WAITROSE</b> Surface Limescale remover	2.19	4	Spray liquid	★★★★	★★★★	★★★	69
5 <b>KILROCK</b> Multi Purpose Power Spray	2.69	4	Spray liquid	★★★★	★★★★	★★★★	65
6 <b>LIMELITE</b> Leave On Active Gel	2.48	10	Gel	★★★★★	★★★★	★	62
7 <b>FLASH</b> Ultimate	1.98	3	Spray liquid	★★	★★★★★	★★★★	57
8 <b>CILLIT BANG</b> Power Grime and Lime Cleaner	2.98	8	Spray liquid	★★★	★★★★	★★	46
9 <b>VIAKAL</b> Limescale Remover	2.82	11	Spray liquid	★★★	★★★★	★	45
<b>KETTLE DESCALERS</b>							
10 <b>KETTLE KLEAR</b> Multi Purpose Descaler and Cleaner	1.95	65	Tablets	★★★★★	★★★★	★★★★★	82
11 <b>KILROCK</b> Descalene Specialist Limescale Remover	1.77	88	Powder granules	★★★★	★★★★	★★★★	71
12 <b>OUST</b> All Purpose Descaler	1.95	46	Liquid sachet	★★★	★★★★	★★★★★	71
13 <b>WAITROSE</b> Appliance Descaler	1.99	80	Liquid	★★★★★	★★	★★★★	70
14 <b>OUST</b> All Purpose Descaler Liquid	1.79	88	Liquid	★★★★	★★★★	★★★★	68
15 <b>QUICKSHINE</b> Descaler Bag	0.99	99	Powder	★★★★★	★★★	★★★	68
16 <b>SCALE AWAY</b> Appliance Descaler	1.17	117	Powder granules	★★★★	★★★★	★★	56

## USING THE TABLE

We tested 16 of the bestselling products from some of the leading manufacturers. The more stars the better.

## Specification

**Price** For Best Buys we give the cheapest widely available high-street price. Prices for other products are a guide. For those available only online, prices

are in *italics*. **Cost per use**

For kettles, this is the recommended amount. For sprays, no amount is given, so we weigh the liquid we use. One use was on average seven sprays, 7.5g.

## Test performance

**Performance** How well a standard amount removed limescale. We had to use more than this of Cillit Bang and Viakal. **Value for money** Based on cost

and amount used.

## Score

This is based on:

Performance	50%
Value for money	30%
Ease of use	20%