

# **Elcometer 134**

## **CHLOR\*TEST Salt Detection Kit For Abrasives & Concrete**

**(Patent Pending)**

### **Operating Instructions**

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A Material Safety Data Sheet for the CHLOR\*EXTRACT Solution used in the Elcometer 134 CHLOR\*TEST Salt Detection Kits is available to download via our website:

[www.elcometer.com/images/MSDS/ELCOMETER\\_134\\_chlor\\_extract.pdf](http://www.elcometer.com/images/MSDS/ELCOMETER_134_chlor_extract.pdf).

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A copy of this Instruction Manual is available for download on our Website via [www.elcometer.com](http://www.elcometer.com).

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Thank you for your purchase of this Elcometer 134 Chlor\*Test Salt Detection Kit. Welcome to Elcometer. Elcometer are world leaders in the design, manufacture and supply of inspection equipment for coatings and concrete. Our products cover all aspects of coating inspection, from development through application to post application inspection.

This Elcometer 134 Chlor\*Test Salt Detection Kit is a world beating product. With the purchase of this product you now have access to the worldwide service and support network of Elcometer. For more information visit our website at [www.elcometer.com](http://www.elcometer.com)

## **1 ABOUT THIS TEST KIT**

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Chloride Salts left on a surface before application of a coating can result in the coating system being forced off the surface by corrosion or blistering before the full life of the coating has been reached.

This Elcometer 134 Chlor\*Test Salt Detection Kit allows recycled abrasive media to be tested for the presence of chloride salts that may contaminate the cleaned surface.

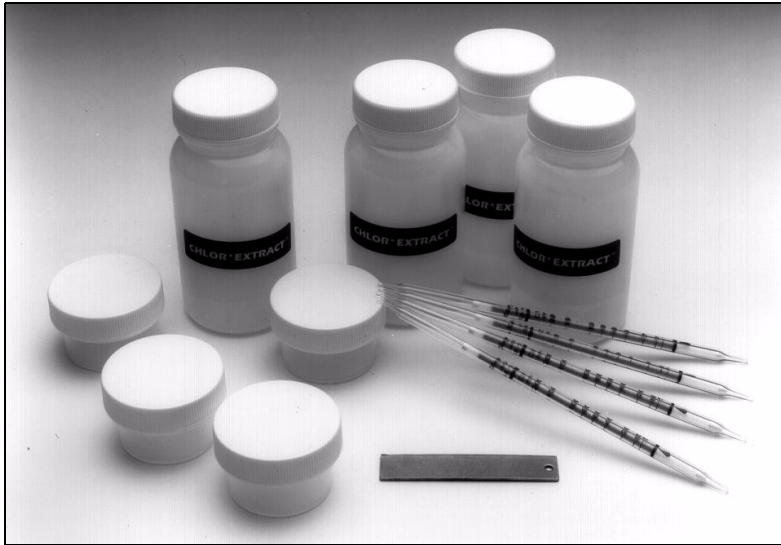
The kit contains sufficient material for 4 tests.

### **1.1 WHAT THE BOX CONTAINS**

Each Elcometer 134 Chlor\*Test Salt Detection Kit contains:

- Detection kit, x 4 (each containing: Abrasive sample container, Mixing container with a pre-measured quantity of Chlor\*rid Extract Solution, Titration Tube)
- Titration Tube Snapper
- Strap

Your Elcometer 134 Chlor\*Test Salt Detection Kit is packed in a cardboard and foam package. Please ensure that this packaging is disposed of in an environmentally sensitive manner. Consult your local Environmental Authority for further guidance.



## 2 GETTING STARTED

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Read these instructions fully before opening an Elcometer 134 CHLOR\*TEST detection kit.

### 2.1 PRECAUTIONS

- Protect hands and eyes.
- Do not touch arrow ends of glass titration tube with fingers as salt from the skin will cause reading errors.
- Keep the titration tubes out of reach of children.
- Discard used tubes carefully according to relevant local regulations.

### 2.2 RESPONSIBILITY

It is the sole responsibility of the user to ensure that titration tubes are not used when they are either beyond their expiration date or have colour which is different to that referenced in “Titration tubes specification” on page 7.

The Manufacturer and/or the Manufacturer’s Distributor shall not be otherwise liable for any incorrect measurement or any damages, whether damages result from negligence or otherwise.

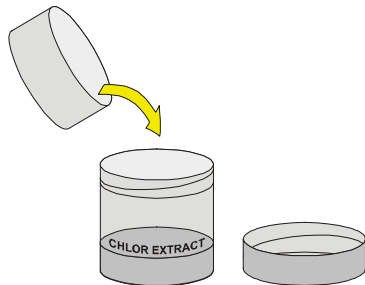
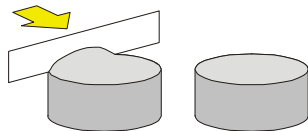
Manufactured by: CHLOR RID International, Inc.

Supplied by: Elcometer Ltd, [www.elcometer.com](http://www.elcometer.com)

### 3 TEST PROCEDURE

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1. Overfill the small container with a sample of the abrasive to be tested and level off using the metal tube snapper.
2. Unscrew the lid of the mixing container with the test solution and transfer the measured abrasive sample into the solution taking care not to spill any solution.
3. Replace the lid tightly and shake the mixing container vigorously for two minutes.
4. Allow the mixing container to stand for approximately ten minutes or until there is about 10 mm (½ inch) of clear solution above the abrasive before proceeding.
5. Using caution and avoiding touching the ends of the titration tube, snap off both ends with the metal snapper provided.

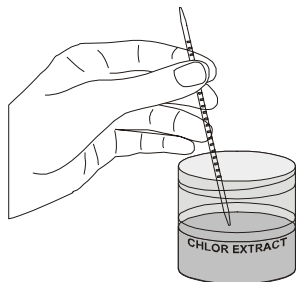


6. Holding the body of the titration tube, insert the end marked with an arrow (small numbers) into the clear solution.

Care must be taken not to touch the tube against the abrasive or to allow particles of abrasive to be sucked into the tube. This will affect the accuracy of the titration tube.

Wait approximately 1½ minutes or until solution is wicked up to the top of the titration tube.

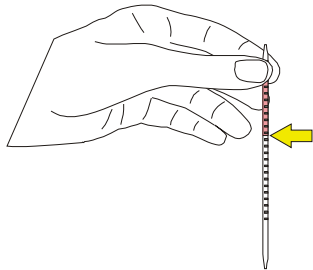
*The cotton at the top of the titration tube will change colour to amber when fully saturated.*



7. Immediately remove the tube and read the number on the scale at the point where the colour changes.

Pink is normal, white is the chloride level.

This scale is calibrated in parts per million (ppm).





## 4 TITRATION TUBES SPECIFICATION

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### 4.1 PERFORMANCE

Measuring Range:	1 ppm to 60 ppm
Sampling Time:	14 minutes
Colour Change:	Pink to White
Detectable Limit:	1 ppm
Storage Condition:	In a cool and dark place, not exceeding 25°C (77°F)

### 4.2 CORRECTION FOR AMBIENT CONDITIONS

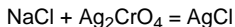
No temperature correction is necessary when the sample solution temperature is between 5°C (41°F) and 80°C (176°F).

### 4.3 IONIC EFFECTS

Co-existence of Bromide ions, Iodide ions or Cyanide ions respectively with Chloride ions gives higher readings. Sulphide ions produce a brown stain in the indicator and their coexistence with Chloride ions produces a brown stain in the bottom of the stained layer and gives higher readings.

A test solution pH value within the range 3.5 to 11 does not affect the readings. Less than pH 3.5 or more than pH 11 gives higher readings than would be normal for the Chloride ions present in the solution.

### 4.4 CHEMICAL REACTION IN THE DETECTOR TUBE



## 5 RELATED EQUIPMENT

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In addition to the Elcometer 134 Chlor\*Test Salt Detection Kit, Elcometer produces a wide range of other coating testing equipment. Users of the Elcometer 134 Chlor\*Test Salt Detection Kit may also benefit from the following Elcometer products:

- Elcometer 130 Salt Contamination Meter
- Elcometer 134S Chloride Ion Test Kit for Blast Cleaned Surfaces
- Elcometer 134W Chloride Ion Test Kit for Water/Liquids
- Elcometer 138 Bresle Kit and Patches

For further information contact Elcometer or your local supplier. Details of Elcometer offices around the world are given on the outside cover of these operating instructions. Alternatively visit the Elcometer website, [www.elcometer.com](http://www.elcometer.com)