

Technical User Guide

Chloride Surface Test Kit

Chloride Test Kit for Soot or Fire Decontamination

Application	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. A background level of chloride is always present on all surfaces, arriving in the air as an extremely fine dust of Sodium Chloride (NaCl) produced by evaporation of sea spray.		
Features & Benefits	Quick on site test for chloride contamination		
	Low range testing for surface contamination		
	Excellent for quick chloride profile map		
	Does not contain any hazardous chemicals		
	• Does not require any complex titration or calibration steps.		
	 Can be used on all different contents and building surfaces after fire contamination. 		
Technical	Test Strip Test Colour Match		
Specification	Number of tests: 40		
	Parameters: Chloride - as Cl ⁻		
	Platform : Test Strip (Reading below 1.4 is not relevant, so unit 1 on the test strip points to zero)		
	Range: 0.3 – 8.9 µg/cm ²		
Equipment Required	Test Strips		
	Cotton swabs		
	De-ionised water		
	100ml Plastic Beaker		
Control sample	 A control test is always necessary to validate the testing kit. User instructions from step 1 to 8 must be followed to carry out a control test by using neat De-ionised water sample. 		

Issue No.1

Issue Date: 06-04-17

Rozone Ltd, Queen Street, Darlaston, Wednesbury, West Midlands WS10 8JF **Part of the Rozone Group of Companies**



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	De-ionised water sample reading should be zero on the test strip scale. Once the reading is recorded as zero then soot samples can be collected to determine the level of chloride as per user instructions below.		
Use Instructions	 Collect samples with cotton swabs X2 from contaminated area(1cm square) 		
	$1 \text{ cm} \qquad 10 \text{ mm} \qquad 10 $		
	2. Pour 100 ml de-ionised water in to the glass beaker		
	3. Dissolve collected surface dust from cotton swab into the plastic beaker and mix the water sample for 2 minutes.		
	4. Remove a test strip from bottle and replace cap immediately.		
	 Insert lower end of test strip into solution. Do not allow solution to reach yellow completion band at the top of test strip. 		
	6. Allow the solution to completely saturate. Reaction is complete when yellow band turns dark.		
	7. Note where the tip of white chloride peak falls on the number on the test strip scale. This represents the unit value.		
	8. Refer to the Table 1 below to convert these units in to $\mu g/cm^2$ Cl ⁻ (chloride).		
Chart reference	Table 1		
Precautions	Always observe precautions and observe health & safety at the workplace		
	This testing kit must be used a quick reference guide for the		

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presence of Chloride. It does not refer to any industry standard set by the relevant competent authority. Please contact our Technical Team for expert advice.
Always check use by date.

Table 1 – Comparison Chart to measure units in µg/cm²

Test strip units	µg/cm² Cl⁻	Test strip units	µg/cm² Cl⁻
1.0	0.0	7.8	6.3
1.4	0.3	8.2	6.7
1.8	0.5	8.6	7.1
2.2	0.6	9.0	7.6
2.6	0.7	9.4	8.0
3.0	0.9	9.8	8.5
3.4	1.0	10.0	8.9
3.8	1.4		
4.2	1.6		
4.6	1.9		
5.0	2.3		
5.4	2.7		
5.8	3.1		
6.2	3.6		
6.6	4.1		
7.0	4.8		
7.4	5.4		

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