

AMENDMENT NO: 02 TO SLS 911: 1990

SRI LANKA STANDARD SPECIFICATION FOR POTASSIUM CHLORATE

SRI LANKA STANDARDS INSTITUTION

Amendment No: 02 approved on 2018-11-16 to SLS 911: 1990

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**APPENDIX A
DETERMINATION OF POTASSIUM CHLORATE CONTENT**

Delete the text given in Appendix A and substitute the following:

“A.1 REAGENTS

- A.1.1** Concentrated Hydrochloric acid
- A.1.2** Sodium hydrogencarbonate, analytical grade
- A.1.3** Iodate free Potassium iodide
- A.1.4** Sodium thiosulphate solution, 0.1 M

A.2 PROCEDURE

A.2.1 Dry the material over Sulfuric acid for 24 h. Weigh, to the nearest milligram, 0.4 g of the material and dissolve in water in a 250-ml volumetric flask. Take 25 ml of the solution in a glass-stoppered conical flask and add 3 ml of concentrated Hydrochloric acid followed by two portions of about 0.3 g each of Sodium hydrogencarbonate to remove air. Add immediately about 1.0 g of iodate-free Potassium iodide and 22 ml of concentrated Hydrochloric acid. Stopper the flask, shake the contents, and allow it to stand for 5-10 minutes. Titrate the solution with standard 0.1M Sodium thiosulphate. Carry out a blank titration in the same manner.

A.3 CALCULATION

$$\text{Potassium chlorate, per cent by mass} = \frac{C(V_2 - V_1) 20.4}{m}$$

- C is the concentration, in mol/l, of standard Sodium thiosulphate solution;
- V₁ is the volume, in millilitres, of standard Sodium thiosulphate solution used for the test;
- V₂ is the volume, in millilitres, of standard Sodium thiosulphate solution used for the blank; and
- m is the mass, in grams, of the material taken for the test.”

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