

Technical Bulletin No. 26 (July 2019)

Product update for Salt Test Kits

Purpose

This bulletin describes new improved Salt Test Kits for detection of iodine in salt that has been fortified either with potassium iodate (KIO_3) or potassium iodide (KI), supplied by UNICEF. The improvements are designed to:

1. Easily identify the presence or absence of iodine in fortified salt by comparing the colour that results from the test reaction to a standard colour spectrum provided in a colour chart.
2. Support better differentiation between the two types of salt test kits.
3. Facilitate use in different settings as the instructions are now available in four languages: English, Spanish, French and Arabic. Instructions in other languages can be considered on request.
4. A safety pin is now included in the salt test kits to enable easy opening of the ampoules/vials.

The changes to the packaging and colour reference chart are described below.

Background

The use of the previous salt test kits was leading to confusion as these were being used for **quantitative** measurements (to determine the amount of iodine present in a salt sample). The kits are not suitable for this purpose; they should only be used for **qualitative** measures i.e.: to determine the presence or absence of iodine in a salt sample only. The colour reference chart included in the kits now include a purple colour range which indicates the presence or absence of iodine.

Furthermore, the previous two types of kits were not easy to tell apart, due to very similar labelling. This led to errors when ordering the kits and when selecting the correct kit in the field.

What has changed?

Colour reference range

Instead of the three colour reaction chart based on the concentration of iodine (white: 0 ppm, light purple: below 15 ppm and dark purple: above 15 ppm), a colour range reference chart has been included in the kit. This colour range in the chart is compared to the colour of the reaction in the salt during the test to determine absence (no reaction – white) or presence of iodine (reaction – any colour in the purple range). The higher the concentration of iodine in the sample the darker the reaction colour will be, however, this test is not quantitative and does not determine the concentration of iodine in the sample (Figure 1).

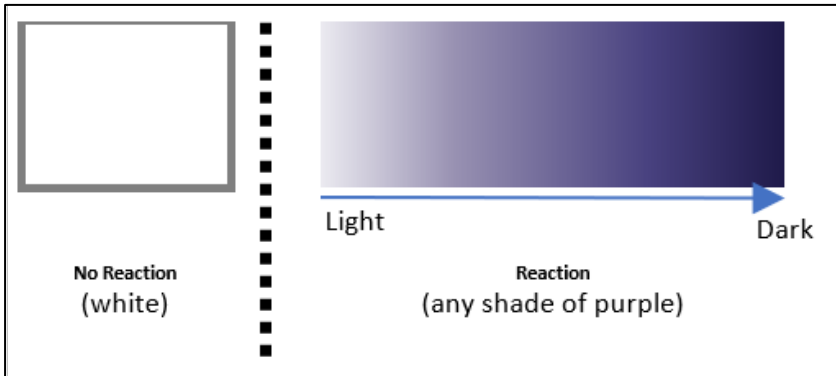


Fig.1 New colour reference range. Available in four languages: English, French, Spanish and Arabic.

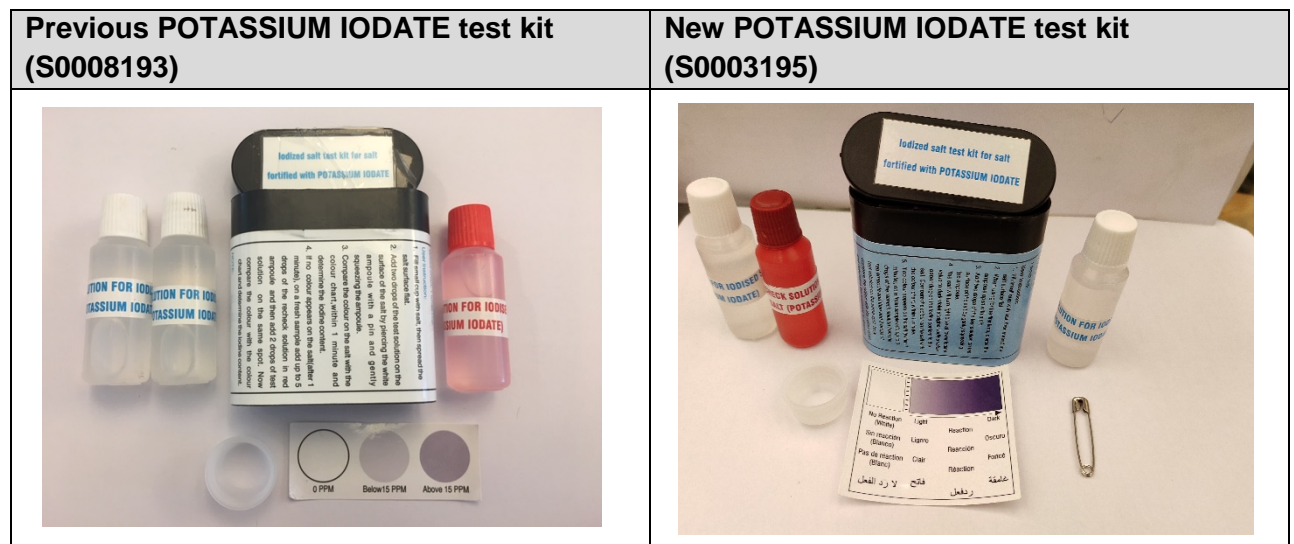
The two types of kits are easier to differentiate:

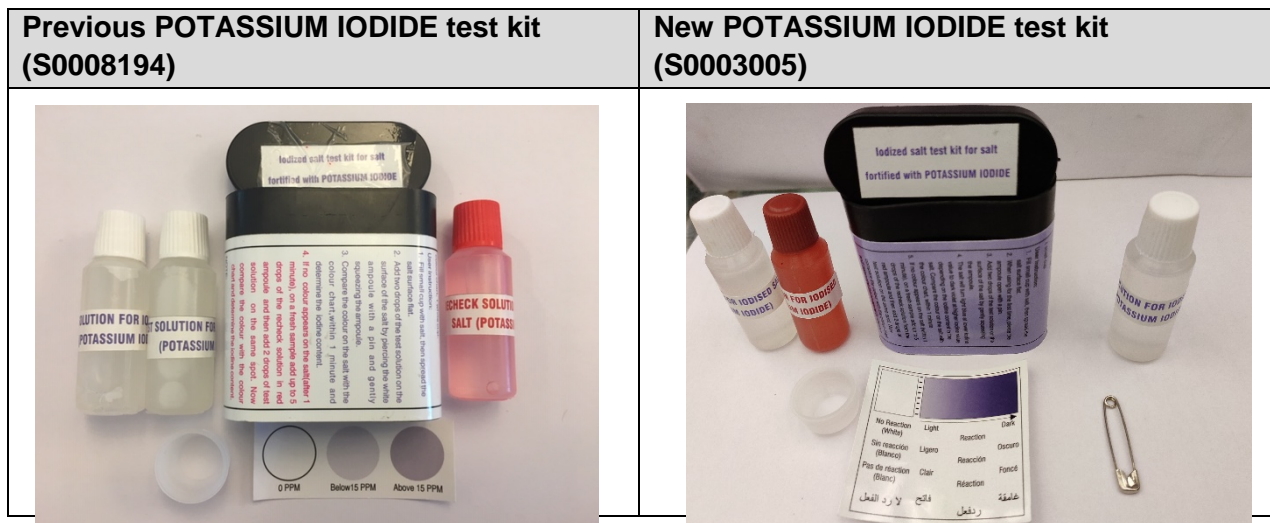
There are two new types of kits available:

- For testing salt fortified with potassium iodate (KIO_3) (S0003195)
- For testing salt fortified with potassium iodide (KI) (S0003005)

The packaging of these two kits are now easier for the end user to differentiate with differently colored labels. **Blue** for the potassium iodate kit and **purple** for the potassium iodide kit.

NB: Please note that S0008193 Potassium iodate test kit and S0008194 Potassium iodide test kits will be phased out and replaced with the updated versions by the end of 2019.





Instructions are now available in four languages:

Instructions leaflet is now available in four languages, English, Spanish, French and Arabic. If required, the instructions can be made available in other languages.

Safety pin included:

Safety pin included in the kits to enable piercing the ampoules/vials open for first time use.

Maria Elisa Forteza, 10th July 2019

For queries or further information please contact: sdnutritionsupplies@unicef.org