TESTING PROCEDURE: TESTING BY DTC - REAGENTS

perform the following table:

	BLANK	SAMPLE	
	TUBE	TUBE	
	DTC	SAMPLE	
	SOLUTION	EXTRACT	
	250	250	
	microlitre	microlitre	
DTC-1	250	250	shake
	microlitre	microlitre	
DTC-2	20	20	shake
	microlitre	microlitre	
DTC-3	250	250	shake
	microlitre	microlitre	
DTC-4	500	500	shake
	microlitre	microlitre	
DTC-5	200	200	shake
	microlitre	microlitre	*and
			observe the color
			the color

* If there are no color in every tubes, add 100 ul. of DTC- 5 in every tubes (shake and observe the color)

Evaluate the result : compare the color in the blank and sample tubes

EVALUATION THE RESULT



COLOR IN THE TUBE	RESULT	
→ Sample tube ≤ Blank tube	Not detected	
→ Sample tube > Blank tube	Detected, Safe	
+ An obviously violet color - grey appear	Detected, Unsafe	
in the sample tube		

CAUTION

- Place testing kit out of children reach
- Should wear gloves during analysis
- When the chemical reagents contact your skin, wash out with the clean water.
- After using the DTC Reagents, cap the bottles immediately

STORAGE OF DTC - REAGENTS

Keep a set of DTC –Reagents at below 30°C, can be used with 6 months.



FUNGICIDE DITHIOCARBAMATE TEST KIT

FUNGICIDE: DITHIOCARBAMATE

Fungicide: Dithiocarbamates are another group of pesticides, widely used in the agricultural products especially in vegetables and fruits. Some chemicals in these group are less toxic, some are very toxic and there is a data of causing carcinogenic in the test animal. Nowadays, the trend of imported dithiocarbamates are going up, but there is no monitoring data of these residues in food. Therefore, the rapid test is now necessary in testing them for consumer protection.

DTC TEST KIT

Detection Limit: Peppers, Chili 0.8 mg./kg.

(as mancozeb) Other vegetables & Fruits 0.4 mg./kg.

TARGET SAMPLE

Vegetables & Fruit

TARGET COMPOUNDS

ZINEB, MANEB, MANCOZEB, METRIRAM, MABAM, NABAM, PROPINEB, THIRAM, ZIRAM, **FERBAM**

EQUIPMENT, GLASSWARES & DTC KIT

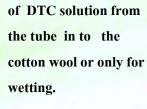
- EQUIPMENT & GLASSWARE:
- Votex Mixer, Test tube, Rack, Forceps, Glass funnel, size 3.5 -4.5 cm., Autopipette size 100-1000 ul. and 10-100 ul.
- DTC REAGENTS:

DTC SOLUTION, DTC - 1, DTC - 2, DTC - 3, DTC - 4, DTC - 5, COTTON WOOL



- **♦** Pipette 1 ml. of test tube
- **★** Roll a cotton wool in cycle diameter about 1 cm. and put in a glass funnel, which supported by 1 ml. DTC solution test tube , then pipette ~ 0.5 ml.





Catch the wet cotton wool by a forceps and swab on the outer part of the sample until the sample left

- + Put the swab cotton wool (already swab the outer part of sample) in to the original tube, then shake with Vortex
- **Catch the wool from** the tube and put on the glass funnel.
- **♦** Squeeze the wool until drying. Then leave the wool and take the glass funnel off.
- **♦** Shake the sample extract homogeneously and bring to test for DTC -residues with DTC -Reagent Kit.

