

10 samples

# M J P K Test Kit

Screen pesticide residues in vegetable and fruits

## Test Kit

# M J P K

Screen pesticide residues in Vegetable & fruits



Distributor.....

Number of Samples per Kit

## Procedure after the Test Finished

- Local and federal regulations for proper disposal of all reagents and test tubes by soaking in 1:10 dilution of Dettol or Clorox for at least 30 minutes.
- Wash the glass test tube with non-ionic surfactants, follow by water for reuse.

## Precautions

- All reagents are chemicals. If they contact your skin or any parts of body, wash out immediately with plenty of clean water follow by surfactant. For reagent 2 may be infected, rub or clean with 70% alcohol or disinfectant.
- Put test kit away from children reach.
- Do not mix components from different kit lots and do not use any reagents beyond their stated shelf-life. Care should also be taken to keep all bottles tightly capped.

## Confirmation Test

The MJP K screening Kit provides screening results. Positive results should be confirmed by standard method at Bureau of Quality and Safety of Food, Department of medical Sciences.

## Place to order / Tests Kit



**GLOBAL COMPLEX CO., LTD**

712 Happyland sai 1 Rd., Klongchan Bangkok  
Bangkok 10240

Tel. 02-375-2455-58 Fax. 02-375-2499

E-Mail : [kongdet@gmail.com](mailto:kongdet@gmail.com)

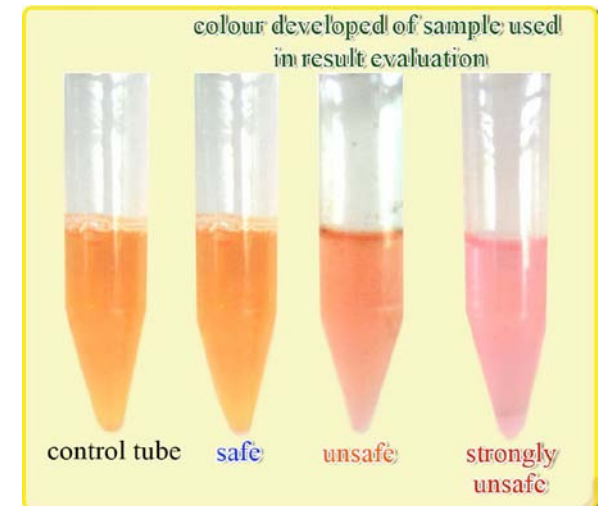
[www.gccthai.com](http://www.gccthai.com) [foodsafetykit@gmail.com](mailto:foodsafetykit@gmail.com)

## Interpretation of results

Evaluate the developed colour of sample tube compare to negative control tube.

Dark orange as control tube	➡ safe
Orange mix with Pink	➡ unsafe (15% inhibition)
Light pink	➡ strongly unsafe

Result pictures



## Quality Control

The negative control must be included in each run and must use the same reagents used with the unknown samples. If the negative control fails to result observable dark orange colour, the test is invalid and should be repeated.

# M J P K Test Kit

Screen pesticide residues in vegetable and fruits

The *MJPk test kit* is a qualitative screen, Colourimetric assay for the detection of organophosphate and carbamate pesticide residues in vegetable and fruits based on their inhibition of the enzyme cholinesterase (ChE). If pesticides from the organophosphate and carbamate groups are present, colour formation will be reduced. Detection limit for ability to inhibit the enzyme is 15% which means that slight poisoning indicates Unsafe. Accuracy and specificity of procedure are 85 and 81%, respectively (false positive is 15%, False negative is 0%)

## Test Kit Component

### Materials

- |                                      |           |
|--------------------------------------|-----------|
| 1. Plastic bottles (extract bottles) | 10 bottle |
| 2. Glass test tubes                  | 10 tubes  |
| 3. Plastic test tubes                | 11 tubes  |
| 4. 3 cc. Plastic droppers            | 3 pieces  |
| 5. Small plastic dropper             | 1 piece   |
| 6. Gloves                            | 2 pairs   |



### Reagents

- |                    |          |
|--------------------|----------|
| 1. Extract solvent | 1 bottle |
| 2. Distilled water | 1 bottle |
| 3. Reagent 1       | 1 bottle |
| 4. Reagent 2       | 1 bottle |
| 5. Reagent 3       | 1 bottle |

## Assay Procedure



1. Chop analysed vegetable or fruits and put into extract bottle about level 3 of the bottle.



2. Add 6 cc. extract solvent, tightly cap and vigorously shake or vortex for 2 minutes.



3. Open the cap with caution and pour the extract solvent to glass test tube.



4. Evaporate the extract solvent by putting into a cup containing warm water.



5. During evaporation, prepare reagent 1 by adding 1 cc. distilled water



6. Stir the dipped tube until remains approximately 1 drop, then roll to left and right for dryness.



7. Add 3 cc. reagent 2 into the tube in step 6 and the control tube.



8. Add 2 drops reagent 1 into the analysed and control tube in step 7, mix thoroughly and incubate for 5 minutes.



9. Transfer the solution from the analysed tube to plastic tube.



10. Add 2 drops reagent 3 into the analysed and control tube. At the exactly 5 minutes, evaluate colour in the analysed tube compare with the control tube.