

# DETIA DEGESCH

## PHOSPHINE TOLERANCE TEST

EFFECTIVE TESTING OF  
INSECTS' TOLERANCE  
TOWARD PHOSPHINE



- » Rapid, easy and practicable method
- » Scientifically backed-up
- » Tool for professional Tolerance Monitoring
- » High Occupational safety
- » valid data for many storage pest insects

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# PHOSPHINE TOLERANCE TEST

## BACKGROUND INFORMATION

The PHOSPHINE TOLERANCE TEST is intended for assessing the behavior, activity and tolerance of storage insect pests toward a defined phosphine concentration. Here under a selection of the insects the kit can provide information on:

- » *Oryzaephilus surinamensis*
- » *Cryptolestes ferrugineus*
- » *Sitophilus granarius*
- » *Tribolium castaneum*
- » *Lasioderma serricorne*
- » *Acanthoscelides obtectus*
- » ...

The Detia Degesch Group is worldwide responsible for the development, marketing and sales of various phosphine fumigation products. With the introduction of the improved PHOSPHINE TOLERANCE TEST, we created a tool to highlight the seriousness and professionalism of operating our products. We recommend the use of the test for every phosphine fumigator to build up an own Phosphine Tolerance Monitoring System or to improve existing fumigation protocols. Furthermore, the test should be used in case of suspected tolerance or under authority requirements.

For further information, please contact Detia Degesch GmbH at [export@detia-degesch.de](mailto:export@detia-degesch.de) or through [www.detia-degesch.de](http://www.detia-degesch.de)

## HOW DOES IT WORK

Specifically designed pellets included in the PHOSPHINE TOLERANCE TEST rapidly generate a defined phosphine atmosphere when put into water. Immediately after the exposure to water the pellets react and therewith begins the release of phosphine. Afterwards the insects are placed in contact with a precise concentration of 3000 ppm gas. Observing their behavior at this concentration during a specific period of time gives a good estimate of possible tolerance toward phosphine.

## WHAT ARE THE STEPS WHEN SUSPECTING TOLERANCE TOWARD PHOSPHINE?

If your evaluation shows a risk of tolerance toward phosphine, it is even more important to perform a fumigation according to good fumigation practice:

- » Check the tightness of the structure
- » Increase the exposure time to the maximum according to the registration of the product
- » Increase the dosage to the maximum according to the registration of the product
- » Continually measure phosphine concentration during fumigation
- » Do not fumigate, if commodity temperature is below 10° C

