



P-I-R Overview

Unlike the standard or toxic chemicals used by the pest extermination industry, the mechanism and action of the amino acid and surfactant formulation of P-I-R is very different.

Traditional chemical pesticides kill via the central nervous system. These toxins are either ingested through the mouth or absorbed through the feet of certain bugs which then attack and kill. In most commercial applications, there is a residual film of chemicals deposited onto a variety of hard and soft surfaces that include floors, couches, carpet, pillows, and bed mattresses. Effectiveness still depends on the skill and experience of the operator who deploys these chemicals. Correct application to the correct location is what counts. In any case, these chemicals will retain certain toxic characteristics no matter where or how effectively they are applied.

The secret to P-I-R and its uniquely reliable performance is a combination of the proprietary fortified blend of naturally safe raw materials in combination with application protocol.

Insects and parasites are naturally covered with a protein based polysaccharide coating called chitin. Chitin is a protective outer covering made of a tough semitransparent substance that forms part of the protective outer casing of some insects and other arthropods including the cell walls of some fungi.

This material is complex enough to be considered a natural polymer and in laymen's terms is simply a coating largely made up of carbohydrates. While this protective layer has varying thicknesses from one insect to another, it is widely thought to be what protects the insect from outside forces and harm. It also provides some fundamental or structural strength to the bug itself. From time to time certain insects will shed this natural material as part of their molting process.

When applied directly and liberally onto the pest, the P-I-R solution will immediately go to work degrading the chitin by catalyzing or breaking down this complex "carbon molecule" thus exposing it to outside forces that eliminate the bug. P-I-R essentially removes the protective outer armament.

With correct application protocol, P-I-R can be equally or more effective than traditional chemicals. P-I-R is most effective around the feet and or joint areas where the chitin layer is much thinner. Once degraded sufficiently, the insect then becomes susceptible to other external conditions including exposure to bacteria which ultimately translates to extermination. P-I-R also attacks the chitin on the egg.

Given that most professional and licensed exterminators are trained and proficient in knowing where to locate and spray for most pests, P-I-R offers a safe, effective, non residual, non toxic remediation alternative to customers. The choice can now become the customer's – Toxic vs. Non-toxic treatment.

P-I-R inhibits and removes pests naturally. The significant difference that defines P-I-R as an MRP (Minimal Risk Pesticide) as defined by the EPA (Environmental Protection Agency), is the product content and its non toxic and non harmful characteristics. Application of the product is important. P-I-R must be sprayed directly on to the pest. Aside from employing the use of safe raw materials, the ability to spray directly onto the pest whether or not it is actually visible at the time of treatment helps determine effectiveness.

P-I-R complies to and is EPA exempt from FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) registration requirements as outlined in 40 CFR sections 152.25(f). Please contact NanoHygienics Inc. for more information.