

## Summary table – Commonly used pesticide chemical classes

Chemical Class	Product Examples	Uses	Properties	Modes of Action	Hazards
Organo-phosphates	<ul style="list-style-type: none"> <li>➤ Dursban (chlorpyrifos)</li> <li>➤ Baytext 550 Spray (fenthion)</li> <li>➤ Insectigas-D (dichlorvos)</li> </ul>	Broad spectrum <i>(can be used on a variety of insects).</i>	High toxicity. Low to moderate persistence.	Acetylcholinesterase inhibitor (affects nervous system).	Highly toxic to humans in concentrated form.
Carbamates	<ul style="list-style-type: none"> <li>➤ Ficam D &amp; W (Bendiocarb)</li> <li>➤ Blattanex Aerosol (Propoxur)</li> </ul>	Broad spectrum.	Moderate toxicity. Usually low persistence.	Rapidly reversing Acetylcholinesterase inhibitor (affects nervous system).	Moderate toxicity. Mostly absorbed through skin or ingested.
Pyrethrins	<ul style="list-style-type: none"> <li>➤ Pestigas Pyrethrins Insecticide</li> <li>➤ Py Fog</li> <li>➤ Py Mist</li> <li>➤ Py Spray</li> <li>➤ Pymatic</li> </ul>	Very effective against flying insects, but also used on lice, fleas, cockroaches, etc.	Low toxicity. Contact poisons with high “knockdown” ability. Inactivate readily in air. Generally insoluble.	Sodium channel modulator (affects nervous system).	Low toxicity.
Synthetic pyrethroids	<ul style="list-style-type: none"> <li>➤ Coopex Insecticidal Dusting Powder (Permethrin)</li> <li>➤ Biflex Termiticide (Bifenthrin)</li> <li>➤ Cislin (Deltamethrin)</li> </ul>	Broad spectrum.	Low toxicity Low solubility. Immobile in soil. High adsorption. More stable than pyrethrins. Usually low persistence.	Sodium channel modulator (affects nervous system).	Low toxicity to humans, but highly toxic to fish, aquatic organisms and bees.

### Summary of precautions

When using pesticides, remember to:

- Read the label instructions and follow them carefully
- Consult the MSDS for safety instructions and wear the appropriate PPE
- Prepare a risk assessment for the chemical and the site
- Advise clients of safety risks, information about the treatment and precautions they can take to minimise risks
- Ensure weather conditions are appropriate for application (see Technical Note number 3).
- Consider high risk groups and the persistence of the pesticide and use the product with the lowest toxicity

