

Tank Mixing Pesticides for Crop Production or Vegetation Management

Before you mix products, make sure that each product is registered for the intended use. Always check the product labels for the recommended crops, pests, rates, timing and adjuvants and follow all the label directions on each product used in the tank mix. Make sure that you:

- use an adjuvant only when directed by one of the labels
- apply at the recommended growth stage of the pests and crops on each label and that these are compatible
- follow the directions on the label that **best** protects you and the environment, such as using the largest buffer zone, longest re-entry and pre-harvest intervals and wearing the most protective clothing and personal protective equipment
- **don't mix pesticides if one of the labels states not to mix them**

If you mix pesticides that do not have tank mixing directions on one of the labels, there is **no** guarantee that the tank mix will work. Severe problems could result, including:

- increased hazards to you, the applicator.
- a chemical reaction occurring between the pesticides. The toxicity of the mixture may be reduced or it may increase.
- reduced pest control. This is called an **antagonistic** reaction.
- unacceptable residues on the crop.

When compatible products are tank mixed, the effectiveness of the mixture could be greater than either of the products alone. This is called a **synergistic** reaction.

If you mix products that do not have tank mixing directions, you are responsible for what happens. If unsafe conditions result from using the mix, you may be prosecuted under the Pest Control Products Act.

Before mixing pesticides together, be sure they are compatible. Pesticides are considered compatible if they mix well in the spray tank and work effectively together. Do not use pesticides together if you see separation, coagulation, gelling or curdling when they are mixed. These pesticides are not compatible. Mixing two pesticides which are incompatible is costly and time consuming. Check the label for information about compatible products.

Do not mix more than two types of pesticides (herbicide + fungicide). Cocktail mixtures of pesticides give poor results and may damage your crop. Some pesticides should never be mixed. Read the label for specific directions on tank mixing.