

Review Questions

CHAPTER 4: PESTICIDE FORMULATIONS

Write the answers to the following questions, and then check your answers with those in the back of this manual.

- The name “Sevin 5G” on a pesticide label indicates:**
 - A granular pesticide with 5 percent inert ingredients.
 - A gel pesticide with 5 percent active ingredients.
 - A granular pesticide with 5 percent active ingredients.
 - A gel pesticide with 5 percent inert ingredients.
- Which is the pesticide formulation process by which solid particles are dispersed in a liquid?**
 - ULV solvents.
 - Solution.
 - Suspension.
 - Emulsion.
- Which liquid pesticide formulation consists of a small amount of active ingredient (often 1 percent or less per unit volume) dissolved in an organic solvent?**
 - Emulsifiable concentrate (EC).
 - Ready-to-use low-concentrate solutions (RTU).
 - Ultra-low volume (ULV).
 - Flowables (F)/liquids (L).
- Which liquid pesticide formulation may approach 100 percent active ingredient?**
 - Emulsifiable concentrate (EC).
 - Ready-to-use low-concentrate solutions (RTU).
 - Ultra-low volume (ULV).
 - Aerosols (A).
- Which is a disadvantage of both EC and ULV formulations?**
 - Solvents may cause rubber or plastic hoses, gaskets, and pump parts and surfaces to deteriorate.
 - Contribute to abrasive wear of nozzles and pumps.
 - Require constant agitation to keep in suspension.
 - Difficult to handle, transport, and store.
- Which dry/solid formulation is mixed in water and reduces the risk of inhalation exposure during mixing and loading?**
 - Dusts (D).
 - Wettable powders (WP).
 - Soluble powders (SP).
 - Water-dispersable granules (WDG) or dry flowables (DF).
- Which type of dry/solid pesticide formulation consists of particles that are the same weight and shape?**
 - Dusts.
 - Granules.
 - Pellets.
 - Baits.
- Which is an advantage of microencapsulated materials?**
 - They pose few hazards to bees.
 - Delayed or slow release of the active ingredient prolongs its effectiveness.
 - Their pesticidal activity is independent of weather conditions.
 - They usually require only short restricted-entry intervals.

9. Which type of adjuvant functions as wetting agents and spreaders (i.e., they physically alter the surface tension of spray droplets)?
- A. Surfactants.
 - B. Stickers.
 - C. Extenders.
 - D. Buffers.
10. Which type of adjuvant increases the viscosity of spray mixtures?
- A. Stickers.
 - B. Extenders.
 - C. Plant penetrants.
 - D. Thickeners.