IMPORTANCE OF TANK CLEANING

Reduce the risk of spray carryover damage

Manufacturers require that spray systems be cleaned before and after use. This is not only so that the systems perform well, but also so that the chemical performs the way it was meant to perform. Herbicide carryover can mean stress or damage if applied to a non-intended crop.

Some herbicides are used with higher amounts of adjuvants, surfactants and liquid fertilizers than in the past. These compounds, although necessary, often redissolve leftover residues that contaminate the new spray solution.

Some residues are difficult to remove and injury may occur with each tank load until they are all removed. Traditional cleaners may not neutralize many of today's low rate products. They must be solubilized and flushed out to the spray system.

COMMON REASONS FOR HERBICIDE CARRY-OVER

- 1. ACCUMULATED OR TRAPPED RESIDUES IN THE SPRAY SYSTEM. Older spray systems have a number of surface areas in which residues can accumulate, such as cracked or softened hoses, pumps or pump gaskets, porous of softened tank walls, chemical or hard water encrusted tank walls and irregularly uniform tank walls.
- 2. A RUSHED OR SHORTENED GROWING SEASON. Some applicators may take short cuts when cleaning a spray system if time does not allow. It is possible that residues may remain in the system.
- 3. A CLEANING PROCEDURE THAT USES NO DETERGENTS, ONLY WATER OR AMMONIA. Using only water or ammonia may be an inadequate method for cleaning spray systems. Residues may not be totally removed with this method.
- 4. USING AN INADEQUATE DETERGENT FOR THE WATER CONDITIONS. Some powder detergents may either clump or dissolve poorly in hard water conditions, resulting in inadequate cleaning. Some liquid cleaners may also be inadequate under hard water conditions, tying up with the minerals and forming a scum.

Today's low rate technology demands that special attention be given to cleaning the spray system because problems associated with carryover can be costly.

What you can do

- Clean spray system as soon as possible after use. This will keep the residues from crystallizing and hard water deposits from forming on the tank and hose surfaces.
- Check all hoses. If they are softened or cracked, replace them immediately.
- 3. Clean all screens and nozzles.
- 4. Make sure all pumps used are clean and clear of debris.
- 5. Clean the lid. Take your time and if possible, allow the tank (full of cleaning solution) to sit overnight.
- 6. Keep your spray system clean whenever possible

Why should you use CLEAN-OUT spray tank cleaner

With *CLEAN-OUT* residues are put into suspension and rinsed away with no redeposition of the herbicides.

- $\sqrt{}$ Latest technology in spray systems cleaning, made specifically for today's chemicals.
- √ Highly concentrated liquid tank cleaner.
- $\sqrt{}$ Starts to work immediately with dilution rates up to 400 to 1.
- $\sqrt{}$ Penetrates and solubilizes residues in tanks, hoses and pumps, entrapping them and enabling them to be rinsed away.
- $\sqrt{}$ Formulated to counteract the detrimental effects of minerals commonly found in hard water.
- √ Neutralizes acid residues.
- $\sqrt{}$ Contains anti-redeposition agents to help block contaminants from re-adhering to spray system surfaces. This is important with specific chemicals that cannot be neutralized.
- $\sqrt{\text{Approved by DuPont and Novartis for tank cleaning.}}$



