

# Mixing and handling best practices

# HERBICIDE

#### Liquid Carrier (Not all steps will apply to all situations)

- 1. Tank half-full with water or liquid fertilizer carrier (28%, 32% N) to start
- 2. Begin agitation
- **3.** Pre-slurry Water-Soluble Packets (WSP) With UAN: pre-slurry WSP in water prior to addition to tank

#### 4. Wettable Powders/Dry Flowables

- » DuPont<sup>™</sup> Accent<sup>®</sup> Q, DuPont Basis<sup>®</sup> Blend, DuPont Realm<sup>®</sup> Q, DuPont Resolve<sup>®</sup> Q, DuPont Revulin<sup>®</sup> Q, and DuPont Steadfast<sup>®</sup> Q herbicides With UAN: pre-slurry Wettable Powders/Dry Flowables in water prior to addition to tank
- 5. Compatibility agent (if needed)

#### 6. Nitrogen stabilizer

- » Instinct® nitrogen stabilizer
- 7. Soluble Concentrate (SC) or liquid flowables
  - » DuPont Cinch® ATZ herbicide brands or liquid atrazine
  - » Liquid atrazine (use a compatibility agent if needed, prior to the addition of liquid atrazine)

#### 8. Capsule Suspension (CS) or Suspension Emulsion (SE)

» FulTime® NXT, Keystone® NXT brands, Resicore® and SureStart® II herbicides

#### 9. Emulsifiable Concentrate (EC)

» Lorsban®-4E insecticide, Surpass® NXT herbicide

#### 10. Soluble Liquids (SL)

- » DuPont Abundit<sup>®</sup> Edge (glyphosate), Durango<sup>®</sup> DMA<sup>®</sup>, Enlist Duo<sup>®</sup>, Enlist One<sup>®</sup> herbicides<sup>1</sup>, Glyphosate products and Gramoxone Extra<sup>2</sup>
- 11. COC, NIS, MSO, other adjuvants
- 12. Ammonium Thiosulfate (ATS) (See sidebar for additional instructions when mixing with ATS)
- 13. Top off with liquid carrier

#### Spraying

#### Spray equipment setup recommendations

- Use a higher total spray volume, do not spray less than 10 gal acre. The more carrier, the better the coverage
- Reduce pressure on re-circulation line to less than 50% capacity to avoid over circulation of product
- Optimum spray pressure of 45 PSI or less
- Use 50 mesh or coarser screens on the in-line filter

## Tank Mixing with Ammonium Thiosulfate (ATS)

When tank mixing with ATS, the use of a tank mix compatibility agent composed of alkylarylpolyethanol phosphate esters and other ethoxylated derivatives is required to maintain a uniform sprayable mixture. Nonionic surfactant blend compatibility agents are not acceptable.

### Follow this mixing order:

- 1. Half of the water or liquid fertilizer
- 2. Products (including Resicore<sup>®</sup> herbicide) in the order listed to the left in the general mixing order
- **3.** Phosphate ester-type fertilizer compatibility agent at a proper rate (suggested 0.5-1.0%)
- 4. ATS (Thiosul) at the desired rate (Add after compatibility agent)
- 5. Remaining water or liquid fertilizer

Be sure to agitate throughout tank mixing process. If dry products are used with liquid fertilizer, first fully disperse dry products with water in a separate bucket before dispensing into the tank. If using liquid fertilizer UAN with ATS (Thiosul) be mindful of ratios. If 15% or less of ATS (Thiosul) is added, stable tank mixing can usually be maintained with 0.5% phosphate ester. If more than 15% of ATS (Thiosul) is added, 1% phosphate ester is needed. Avoid overnight storage. Performing a compatibility jar test prior to mixing the first tank containing ATS (Thiosul) is also recommended.

<sup>1</sup>When mixing with Enlist One, do not pour glufosinate ammonium products or glyphosate potassium into the tank at the same time as Enlist One. Add products one at a time, using sufficient water and allowing enough time for recirculation between additions of each separate product. Find qualified tank-mix products for Enlist herbicides at EnlistTankMix.com. Nitrogen carriers cannot be used with Enlist herbicides.

<sup>2</sup> If using paraquat containing product, add (NIS) to tank before adding paraquat product.

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