

# HEADHUNTER™

FOAM DESTROYER



## WHAT MAKES HEADHUNTER™ UNIQUE?

Headhunter™ is our next generation foam destroyer. Headhunter™ is unique compared to ordinary defoamers because of its ability to work faster in a wide range of spray solution pH levels.

By reducing foam formation faster, for longer periods of time, applicators actually save money by using less Headhunter in each load when compared to ordinary defoamers.

### **pH PERFORMANCE FLEXIBILITY**

Spray solution pH can have a significant impact on the performance of a wide range of tank mix partners. This can be the case for ordinary defoaming agents in particular. In over 700 water samples submitted by growers across the Meherrin market area, test results found pH levels from as low as 4.0 to as high as 8.6. These naturally occurring variations in water quality, combined with various tank mix partners like glyphosate, can cause ordinary defoamers to fail.

This results in more costly time delays and expense when applicators attempt to load their sprayers.

Headhunter™ has the ability to knock down foam faster, and remain stable longer, under the wide range of pH levels found in the water sources and tank mixes used in the Meherrin market area.

### **GROWER PERFORMANCE EXPECTATIONS**

Based on the performance across the Meherrin marketing area, growers can expect Headhunter™ to provide faster, more consistent defoaming performance. If persistent foaming continues, contact your Meherrin representative.

### **RECOMMENDED USE RATES**

Based on research and field performance, Headhunter™ neutralizes foam faster and at half the use rate of earlier generation defoamers, and can be used as either an antifoam or defoamer.

**Antifoam:** Use Headhunter™ to prevent foam formation by adding it to the spray solution first, while agitating, and before adding pesticides.

**General defoamer:** Use Headhunter™ as a general defoamer by adding it to the spray solution during agitation while foam formation is active.

### **ACHIEVING OPTIMUM PERFORMANCE**

Always read and follow label directions.

### **PRODUCT PROFILE**

Headhunter™ is formulated to aggressively neutralize foam in all types of agricultural tank mixes. Unlike ordinary defoamers, Headhunter™'s unique blend of formulation aids, emulsifiers and powerful defoaming agents are stable in a wider spray solution pH range, making it ideal for use with all glyphosate formulations.

### **KEY PRODUCT BENEFITS**

- Faster defoaming action
- Use to prevent or eliminate foam
- 50% stronger than ordinary defoamers

*Headhunter™ is a trademark of Meherrin.*



413 Main Street, Severn, NC 27877

# LOWBOY LpH™

WATER CONDITIONING AGENT



## WHAT MAKES LOWBOY LpH™ UNIQUE?

Lowboy LpH™ combines powerful water conditioning agents designed to effectively reduce spray solution pH and sequester antagonistic hard water cations with ammonium ions needed for improved transport of certain herbicides across the cell membrane.

### **WATER CONDITIONING AGENTS**

Spray solution pH and water hardness can have a significant impact on the performance of a wide range of tank mix partners and are known to cause lower levels of performance for many crop protection products.

In over 700 water samples submitted by growers across the Meherrin market area, test results found pH levels from as low as 4.0 to as high as 8.6 as well as a wide range of antagonistic hard water cations. These naturally occurring variations in water hardness are due to high levels of calcium (Ca), magnesium (Mg), sodium (Na), or iron (Fe). While other cations can cause hard water as well, these four are the usual culprits. Ca, Mg, Na and Fe cations (positively charged ions) attach to negatively charged (weak acid) herbicide molecules. If these cations associate (combine) with a weak acid herbicide, either in the tank or on the leaf surface, the herbicide is limited in its ability to be transported in the weed, and becomes ineffective.

Lowboy LpH™ ties up hard water cations in the spray solution, promoting maximum herbicide efficacy.

### **AMMONIUM IONS**

Ammonium ions have been proven to increase uptake of certain herbicides by hard-to-control, nitrogen-responsive weed species. The presence of ammonium ions can also increase herbicide performance in cool weather or under drought conditions.

### **GROWER PERFORMANCE EXPECTATIONS**

Based on the performance across the Meherrin marketing area, growers can

expect Lowboy LpH™ to improve the quality of the spray solution and consequently improve the performance of glyphosate, sethoxydim, dicamba and other weak acid herbicides commonly used on tough-to-control weeds.

If you are trying to control glyphosate resistant/tolerant weeds like palmer amaranth (pigweed) or marestail, we suggest upgrading to Quadfire™ or Backdrop™ for superior performance. Contact your Meherrin representative for rate recommendations.

### **RECOMMENDED USE RATES**

Using the guidelines below, apply Lowboy LpH™ at 1–2 quarts per 100 gallons (0.25–0.5% v/v). Use the higher use rates:

- When replacing 17 lbs. of ammonium sulfate per 100 gallons of spray solution.
- When nitrogen responsive weed species, such as velvetleaf, are present or weeds are under weather stress conditions.

Use the lower use rates:

- When replacing 8.5 lbs. of ammonium sulfate per 100 gallons of spray solution.

### **ACHIEVING OPTIMUM PERFORMANCE**

Always read and follow label directions. The addition of adjuvants to some pesticides and/or fertilizers and their tank mixes may cause phytotoxicity to the foliage and/or fruit of desirable crops. The applicator or crops advisor must have experience with the pesticide combination, including Lowboy LpH™, or must have conducted a phytotoxicity test prior to use. Do not use this product in a manner inconsistent with labeling. Lowboy LpH™ increases the activity of many pesticides. Therefore, care must be taken when treating sensitive crops during periods of drought stress, high temperatures or high humidity.

### **PRODUCT PROFILE**

Lowboy LpH™ is a low-use-rate ammonium sulfate replacement product that combines water conditioning agents and ammonium ions in a convenient premix formulation. Lowboy LpH™ is designed to effectively replace the need for ammonium sulfate with weak acid herbicides such as glyphosate, dicamba and phenoxyes by sequestering antagonistic hard water ions and providing ammonium ions to ensure enhanced uptake of certain pesticides.

### **KEY PRODUCT BENEFITS**

- Concentrated low-use rate formulation
- Protects glyphosate performance potential
- Will not plug screens and nozzles

*Lowboy LpH™ is a trademark of Meherrin.*

# RECON™

COMPATABILITY AGENT

## WHAT MAKES RECON™ UNIQUE?

### ACTIVE INGREDIENT SELECTION

Ordinary compatibility agents just can't handle the stress that urea ammonium nitrate (UAN) and ammonium thiosulfate (ATS) carriers put on the emulsifier systems of many crop protection products. Recon™'s unique formulation was specifically developed to protect and enhance the built-in emulsifier systems of a wide range of crop protection products. This allows applicators to make more timely applications and save money by not needing to make separate applications across the same field.

### HIGH ACTIVE INGREDIENT LOAD

Recon™ has an active ingredient load of over 70%. This makes it ounce-for-ounce more powerful and effective than ordinary compatibility agents.

### ADDITIONAL COVERAGE AND BUFFERING

Recon™'s heavy active ingredient loading also reduces spray solution surface tension to improve leaf surface coverage. Additionally, Recon™ is effective at buffering spray solution pH to protect vulnerable crop protection products from premature chemical breakdown caused by alkaline hydrolysis.

### GROWER PERFORMANCE EXPECTATIONS

Recon™ has been proven to deliver improved superior compatibility in the toughest tank mixes found in the Meherrin marketing area. From burndown applications in corn and soybeans, to pre-emerge tank mixes in peanuts, to harvest aid applications in cotton—many growers have already experienced the advantages that Recon™ delivers. Recon™ excels at creating stable, sprayable tank mixes that won't side-line sprayers with plugged nozzles and time consuming clean-out problems.

### COMPATIBILITY PERFORMANCE

Compatible spray solutions will form a milky white emulsion with no precipitates or "cottage cheese." Tank mixes that appear

transparent indicate that not all the crop protection products are in solution and uniformly mixed. In fact, some of the tank mix partners may have already clabbered and be stranded on the sides of the sprayer or mixing vat, unavailable to do their job in protecting crops. They will also be a source for cross-contamination problems later in the season.



### RECOMMENDED USE RATES

Use 1–4 pints of Recon™ per 100 gallons of spray solution to prevent antagonistic tank mixing conditions.

Use 3–6 pints of Recon™ per 100 gallons of spray solution to correct tank mix incompatibilities.

### ACHIEVING OPTIMUM PERFORMANCE

Always read and follow label directions. The addition of adjuvants to some pesticides and/or fertilizers and their tank mixes may cause phytotoxicity to the foliage and/or fruit of desirable crops. The applicator or crops advisor must have experience with the pesticide combination, including Recon™, or must have conducted a phytotoxicity test prior to use. Do not use this product in a manner inconsistent with labeling. Recon™ increases the activity of many pesticides. Therefore, care must be taken when treating sensitive crops during periods of drought stress, high temperatures, or high humidity.

# A

ADJUVANT

### PRODUCT PROFILE

Recon™ is a concentrated, low-foaming compatibility agent formulated to eliminate incompatibility problems associated with tank mixing a wide range of crop protection products in water, suspension fertilizers, UAN or ATS solutions. Recon™ also demonstrates functionality as a spreader depending on the use rate.

### KEY PRODUCT BENEFITS

- Prevents incompatibility problems that can side-line sprayers
- Ensures uniform applications and reduces nozzle plugging
- Faster and easier sprayer clean-outs for fewer cross contamination problems

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Meherrin®

413 Main Street, Severn, NC 27877

# XTRACT™

SPRAY SYSTEM CLEANER



## WHAT MAKES XTRACT™ UNIQUE?

From the introduction of Roundup Ready® crops and the widespread use of glyphosate, to the development of resistant weeds, there has been a flurry of innovation in the crop production industry over the last twenty years. The spread of resistant weeds has led to the introduction of new herbicides and new formulations, as well as the increased use of tank mix partners with glyphosate. While all of this innovation was necessary for providing solutions in the fight against resistant weeds, it has also created equipment clean-out problems for applicators.

### CONTRIBUTORS TO CROSS-CONTAMINATION

- Many new herbicide formulations, like suspension concentrates, often have limited compatibility or easily settle out in sprayer lines and hoses. This leaves behind hard-to-remove residues that can lead to cross-contamination and crop injury.
- Increased use of tank mix partners can leave a build-up of oily residues in the spray system that ordinary tank cleaners cannot remove.
- Complex sprayers have more “hiding places” for residues that can lead to cross-contamination.
- Ordinary tank cleaners were designed over twenty years ago and are not capable of removing the residues left behind from the herbicide formulations and tank mixes used today. This may be the key reason why expensive crop injury complaints from crosscontamination are on the rise.

### REDUCING THE RISK REQUIRES:

- Preventing incompatibility problems through proper mixing technique
- The use of compatibility agents
- Good clean-out procedures
- Using the best spray system cleaner technology available

Xtract™ is a powerful spray system cleaner that exceeds the capabilities of ordinary tank cleaners. Xtract™ emulsifies oily residues in tanks, sprayer lines, and hoses, while elevating rinsate pH to degrade vulnerable crop protection products. Combined with good sprayer cleaning technique, Xtract™ virtually eliminates the risk of cross-contamination that leads to crop injury complaints, yield loss, and a damaged reputation as a professional applicator.

### PRODUCT PROFILE

Xtract™ is a powerful spray system cleaner that exceeds the capabilities of ordinary tank cleaners. Xtract emulsifies oily residues in tanks, sprayer lines, and hoses, while elevating rinsate pH to degrade vulnerable crop protection products.

### KEY PRODUCT BENEFITS

- Advanced surfactant system that penetrates and removes dried-on residues left behind from incompatible tank mixes
- Emulsifier technology designed to solubilize oily residue build-up for easier purging of the system
- Stronger alkalinity builders that maximize rinsate solution pH levels to rapidly accelerate the breakdown of vulnerable pesticides
- Anti-corrosion inhibitors to protect equipment pumps, seals and plumbing

Selection Guide for Spray Tank Cleaners

	Removes Dried Residue	Solubilizes Oily Residue	Elevates pH	Corrosion Inhibitors
<b>XTRACT™</b>	●	●	●	●
INCIDE-OUT™	●	●	●	●
Ammonia Tank Cleaners	●	●	●	●
Powdered Tank Cleaners	●	●	●	●
Valent Tank Cleaner	●	●	●	●

● Excellent    ● Good    ● Fair    ● Poor

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Xtract™ is a trademark of Meherrin  
Incide-Out™ is a trademark of Precision Laboratories, LLC