



Plant Health Care Inc.

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Technical Bulletin

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RZ-3: A NEW SURFACTANT DEVELOPED FOR USE IN SOLUBLE FERTILIZERS

What is RZ-3?

RZ-3 is newly developed, biodegradable chemo-organic surfactant chemically characterized as an alkoxyated glucopyranoside material.

What Does RZ-3 Do?

RZ-3 has several valuable qualities:

RZ-3 can:

- Act as a surfactant, or wetting agent making water and water solutions penetrate into the soil;
- Act as a stabilizer and compatibility agent that holds minerals in solution or suspension, keeping them from interacting or precipitating, and slowing sedimentation over a broad pH range;
- Reduce the loss of soluble ammonia (an available form of nitrogen) by preventing ammonia volatilization.
- Reduce the rate of nutrient leaching by mass flow of water, so that:
 - ✓ Minerals (including N) are able to distribute evenly throughout the soil profile
 - ✓ Minerals remain longer in the roots' zone of absorption.

RZ-3 has been formulated into some of PHC soluble and miscible products to take advantage of RZ-3's favorable effects on the distribution and availability of mineral nutrients.