

NEW BALANCE™ with Antifoam

pH Acidifier/Nonionic Surfactant

NEW BALANCE is a safe-to-use, citric-based pH acidifier and nonionic surfactant specifically designed to modify spray solution pH when breakdown from alkaline hydrolysis can reduce insecticide performance.

This is particularly important when organophosphate and carbamate insecticides are to be used such as guthion, parathion, malathion, carbaryl, and others.

Research indicates that water with a pH of 8.0–8.2 or higher will cause rather rapid degradation of these insecticides while in solution. Buffering effects occur while the insecticide is in the spray solution, from mixing, through storage in the tank and continues until the water has evaporated from the spray droplet lying on the leaf surface.

Features and Benefits

- Improves coverage of the spray solution on leaf surfaces.
- Lowers the pH of the spray water to prevent alkaline hydrolysis.
- Formulated with antifoam to prevent foaming.

Packaging

Six one-gallon containers.

Use Rates

Solution pH Before	Oz./100 gallons Solution	Solution pH After
8	0	8.0
8	8	5.7
8	16	4.5
8	24	4.0
8	32	3.6
8	40	3.4

University Recommendations for Buffering Insecticides

Insecticide Product	Buffering Advised by University	Optimum pH	Half-Life for given pH					
			9	8	7	6	5	4
Di-Syston	×	5.0	7.2 hours			32 hours	60 hours	
Dibrom	×	5.0	Hydrolyzed in 48 hours in pH > 7					
Dimethoate/Digon	×	5.0	48 min.			12 hours		20 hours
Furadan	×	5.0	78 hours			8 hours		
Guthion	×	5.5	12 hours		10 days		17 days	
Imidan	×	5.0		4 hours	12 hours			13 days
Malathion	×	5.0	5 hours	19 hours	3 days	8 days		
Monitor	×	5.5	Decomposes rapidly at pH > 7					
Sevin (Carbaryl)	×	7.0	24 hours	2.5 days	12 days			
Vydate	×	5.0	3 hours		8 days		Stable at 4.7 pH	

Always use a pH meter or pH paper to verify the appropriate pH level has been achieved.



New Balance is a trademark of Precision Laboratories, Inc.

Specialized Chemistry for Agriculture