



# 4-3-3

## STOCK CONCENTRATE

METRIC

### Mixing Instructions

1. Start with clean stock tanks marked at target volume.
2. Add **RO** water to 50% of target volume; begin agitating the tank.
3. Add fertilizer over 5 minutes, while continuing to agitate the tank.
4. Add **RO** water to target volume; mix for 10 more minutes.
5. Validate and adjust stock tank as necessary.



### 4-3-3 Stock Concentrate Notes

**4-3-3 Stock Concentrate** refers to the number of 11.3 kg bags of each product that are added to a stock concentrate drum - Part A with four 11.3 kg bags per 189 Liters, Part B with three 11.3 kg bags per 189 Liters, and Bloom with three 11.3 kg bags per 189 Liters.

Mixing with the 4-3-3 method allows each fertilizer part to be injected equally. This method is best for situations where the injection equipment requires higher concentrations of stock concentrate and/or lower injection ranges.

3-2-2 STOCK RATES				3-2-2 VALIDATION		
Tank	Part	liters	kg	g/L	ml/L	Validation EC
1	A	189	34	180	20	4.4
2	B	189	22.7	120	20	2.3
3	Bloom	189	22.7	120	20	1.8

#### VALIDATION INSTRUCTIONS:

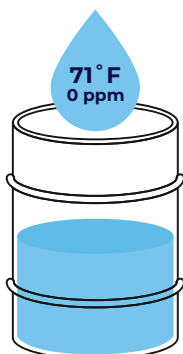
- Remove exactly 20 ml of well-mixed stock concentrate and add to 1 liter of RO water.
- Mix and check EC against validation chart. Adjust stock concentrate strength as necessary to match validation EC
- Repeat for each stock concentrate, validating against EC.

### STOCK CONCENTRATE

1

#### ADD R.O. WATER

Fill stock tank to 50% of final volume



2

#### ADD FRONT ROW & MIX

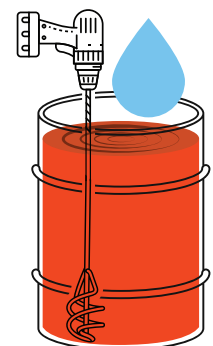
Start agitation, add total g/L for final volume, mix for 5 minutes



3

#### FILL

Continue agitation while filling to final volume, mix for 10 more minutes



# 4-3-3 STOCK CONCENTRATE FEED CHARTS

## STANDARD STRENGTH

Chart Units mL/L		Phase	Veg/Moms	Week 1-2	Week 3-5	Week 6-8/9	Final 1-2 Weeks
		Phase Recipe	Veg	Stretch	Stack*	Swell	Ripen
Base Fertilizer	Stock Rate	Total EC	<b>2.6</b>	<b>2.4</b>	<b>2.2</b>	<b>2.0</b>	<b>1.6</b>
<b>PART A</b>	<b>224 g/L</b>	mL/L	<b>6.2</b>	<b>4.8</b>	<b>4.1</b>	<b>3.2</b>	<b>2.1</b>
		Part A EC	<b>1.7</b>	<b>1.3</b>	<b>1.1</b>	<b>0.9</b>	<b>0.6</b>
<b>PART B</b>	<b>150 g/L</b>	mL/L	<b>6.2</b>	<b>4.8</b>	<b>4.1</b>	<b>3.2</b>	<b>3.3</b>
		Part B EC	<b>0.9</b>	<b>0.7</b>	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>
<b>BLOOM</b>	<b>150 g/L</b>	mL/L		<b>3.4</b>	<b>4.1</b>	<b>5.7</b>	<b>4.9</b>
		Bloom EC		<b>0.4</b>	<b>0.5</b>	<b>0.7</b>	<b>0.6</b>

Optional Inputs:

<b>FRONT ROW Si (ml)</b>	<b>53 mL/L</b>	mL/L	<b>1.9</b>	<b>1.9</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>
<b>PhosZyme</b>	<b>42 g/L</b>	mL/L	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>
		PhosZymeEC	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>

\* "Stack" recipe can be used from start to finish of the flower cycle.

## HIGH STRENGTH

Chart Units mL/L		Phase	Veg/Moms	Week 1-2	Week 3-5	Week 6-8/9	Final 1-2 Weeks
		Phase Recipe	Veg	Stretch	Stack*	Swell	Ripen
Base Fertilizer	Stock Rate	Total EC	<b>3.0</b>	<b>3.0</b>	<b>2.7</b>	<b>2.4</b>	<b>1.8</b>
<b>PART A</b>	<b>224 g/L</b>	mL/L	<b>7.2</b>	<b>6.0</b>	<b>5.1</b>	<b>3.9</b>	<b>2.3</b>
		Part A EC	<b>2.0</b>	<b>1.7</b>	<b>1.4</b>	<b>1.1</b>	<b>0.6</b>
<b>PART B</b>	<b>150 g/L</b>	mL/L	<b>7.2</b>	<b>6.0</b>	<b>5.1</b>	<b>3.9</b>	<b>3.7</b>
		Part B EC	<b>1.0</b>	<b>0.9</b>	<b>0.7</b>	<b>0.6</b>	<b>0.5</b>
<b>BLOOM</b>	<b>150 g/L</b>	mL/L		<b>4.2</b>	<b>5.1</b>	<b>6.9</b>	<b>5.6</b>
		Bloom EC		<b>0.5</b>	<b>0.6</b>	<b>0.8</b>	<b>0.6</b>

Optional Inputs:

<b>FRONT ROW Si (ml)</b>	<b>53 mL/L</b>	mL/L	<b>1.25</b>	<b>1.25</b>	<b>1.25</b>	<b>1.88</b>	<b>2.50</b>
<b>PhosZyme</b>	<b>42 g/L</b>	mL/L	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>
		PhosZymeEC	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>

\* For facilities that want to run one recipe throughout flower, use "Stack" recipe.

### ADDITIVE USAGE RATES:

Additive	Usage Rate	Notes
Front Row Si	0 - 0.13 mL/L	Si usage rate depends on feed EC, please refer to SI vs EC Table.
Triologic	0.26-0.53 mL/L	Recommended to be used 1x per week.
BioFlo	8 mL/L	Use as necessary to remove biofilm from irrigation lines.

### FEED CHART NOTES:

These feed charts are not a prescription, but an example of the general ranges and relationship of EC and recipes that can be used. Each facility and cultivation methodology will require customization of EC values. See the "EC Considerations" section on the Supplemental Information page of our brochure.

