

USE  
IN



BLOOM



SOIL

# Key To Life®

SILICA  
AMENDMENT



**DON'T  
buy  
water**

## Silica

### WHAT IS IT...

6.26% Silicon Dioxide (SiO<sub>2</sub>) derived from Zeolite

Silica is one of the most important products you can use to increase the overall health and natural immunity in your garden. Silicon Dioxide, known to scientists as the 17th nutrient, can be an important addition for gardeners looking for stronger stems, leaves, tissue and better tolerance to high performance environments. Where Potassium Silicate products tend to precipitate with things like Phosphoric Acid as well as drastically affect pH & PPM's. Key to Silica does neither of these things while still providing all of the desired benefits that silicates have to offer.

### PUT IT TO THE TEST...

Try adding 1 cup Silica to a 1/4 gal of water. What happens to the pH & PPM's?

### CONVERSION SILICA

Volume	Weight (g)
1 tsp	4.8
1 Tbsp	14.8
1 Cup	180.3

### HOW + WHEN TO USE IT...

- It is important to use silica throughout the entire lifecycle of the plant
- In early stages, it protects young delicate leaves and new fragile roots to ensure a vigorous start.
- In the late veg/transition phase it ensures proper nutrient flow and strength while your plants prepare for fruiting/flowering.
- During the fruiting and flowering stages, it is extremely important to use to ensure that ALL new growth is a strong and as rigid as possible.
- Use during late fruiting/flowering phase to ensure the healthiest harvest possible.

### ROOT DRENCH\* (PER GAL)

	VEG				BLOOM								
	1	2	3	4	1	2	3	4	5	6	7	8	9
tsp	3/8	3/8	5/8	5/8	7/8	7/8	7/8	7/8	7/8	5/8	3/8	3/8	3/8
grams	2	2	3	3	4	4	4	4	4	3	2	2	2

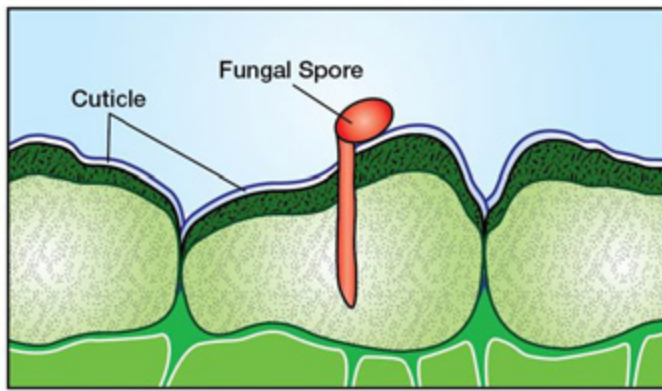
\* Micronized silica is great in teas and soil amending. Recommend running compatibility tests with your irrigation system as it is not fully soluble.

### HOW IT WORKS...

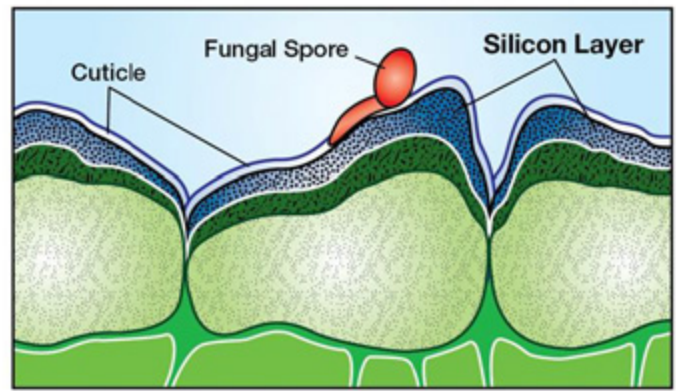
- Silica works by strengthening cell walls of plants while maximizing xylem and phloem flow.
- Increasing the strength of cell walls allows your plant to be more rigid, and in some cases rigid enough to promote plant tissue thickness that creates undesirable scenarios for pesky critters and others.
- Silicon Dioxide in particular is extremely plant available and is actually a great source of calcium and iron!
- Zeolite is also very efficient at holding onto and slow-releasing nutrients and water!
- Silica is extremely nutrient friendly. Some nutrients are very antagonistic when used with other nutrients. Our Silica can be used with almost any fertilizer, biological & supplemental nutrient in your regimen



## Without Silicon



## With Silicon



### BENEFITS...

- After harvest, the use of silica during the grow will ensure long-term preservation of harvest weight, oil/resin and terpenes over time.
- Although silica is not considered an essential plant nutrient, the use of silica can help increase plant health & immunity.
- Using silica can reduce the Lodging, a condition in which the cereal stem of the plant collapses when it can no longer support its own weight.
- Silica can alleviate :
  - Phosphate deficiency
  - Drought stress
  - Salt stress
  - Mn, Cd, As (harmful chemical) toxicity
  - Al, Zn, Fe (heavy metal) toxicity
- Increases resistance to :
  - Strong wind
  - Strong rain
  - Other environmental stresses

### PRO TIPS...

- Use Silica to balance the pH in your soil.
- Use along with Fungi to maximize strength & rigidity.
- Key to Silica can also assist in pulling toxins & potentially harmful substances from your soil.
- Silica can also assist with protecting your plants from high levels of ammonium nitrogen.
- Can help protect against extreme salt environments.
- Apply Silica in a foliar manner to maximize direct leaf tissue absorption.

### RESERVOIR DOSAGE

Reservoir Size (Gal)	SILICA	
	2 g/gal	4 g/gal
5	10.0	20.0
25	50.0	100.0
50	100.0	200.0
100	200.0	400.0
250	500.0	1000.0

### COST PER DOSE

Size	SILICA	
	2 g/gal	4 g/gal
8 oz.	\$0.141	\$0.281
32 oz.	\$0.093	\$0.185
2 Gal. (4lb)	\$0.098	\$0.196
5 Gal. (10lb)	\$0.071	\$0.143
20 lb.	\$0.044	\$0.087
50 lb.	\$0.029	\$0.059

### HOW MANY GALLONS

Size	SILICA	
	2 g/gal	4 g/gal
8 oz.	125.0	53.6
32 oz.	499.8	214.2
2 Gal. (4lb)	999.6	428.4
5 Gal. (10lb)	2499.1	1071.0
20 lb.	4998.2	2142.1
50 lb.	12495.6	5355.2

@KEYTOLIFENUTRIENTS



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