



# Organic

HARNESS THE POWER OF NATURE



**Redox**  
BIO-NUTRIENTS

[REDOXGROWS.COM](http://REDOXGROWS.COM)



# HARNESS THE POWER OF NATURE

With the Redox Organic Line, we have Harnessed the Power of Nature by meeting the highest standards possible. Each Redox organic product has unique characteristics and benefits specifically designed to meet requirements for plant nutrition, product efficacy and regulation. Our agronomic team will provide organic growers customized solutions to maximize yield and return on investment.








Redox technology provides premium sources of nitrogen, phosphorus & potassium, calcium, magnesium, silicon, micronutrients, biostimulants & soil amendments.

Our products excel in four key areas:



### ABIOTIC STRESS DEFENSE

-  Mainstay™ Calcium
-  Mainstay™ Si
-  PeneCal™
-  TriPlex™ Micro
-  TriPlex™ Zinc

### SOIL HEALTH

-  H-85™
-  Mainstay™ Calcium
-  PeneCal™

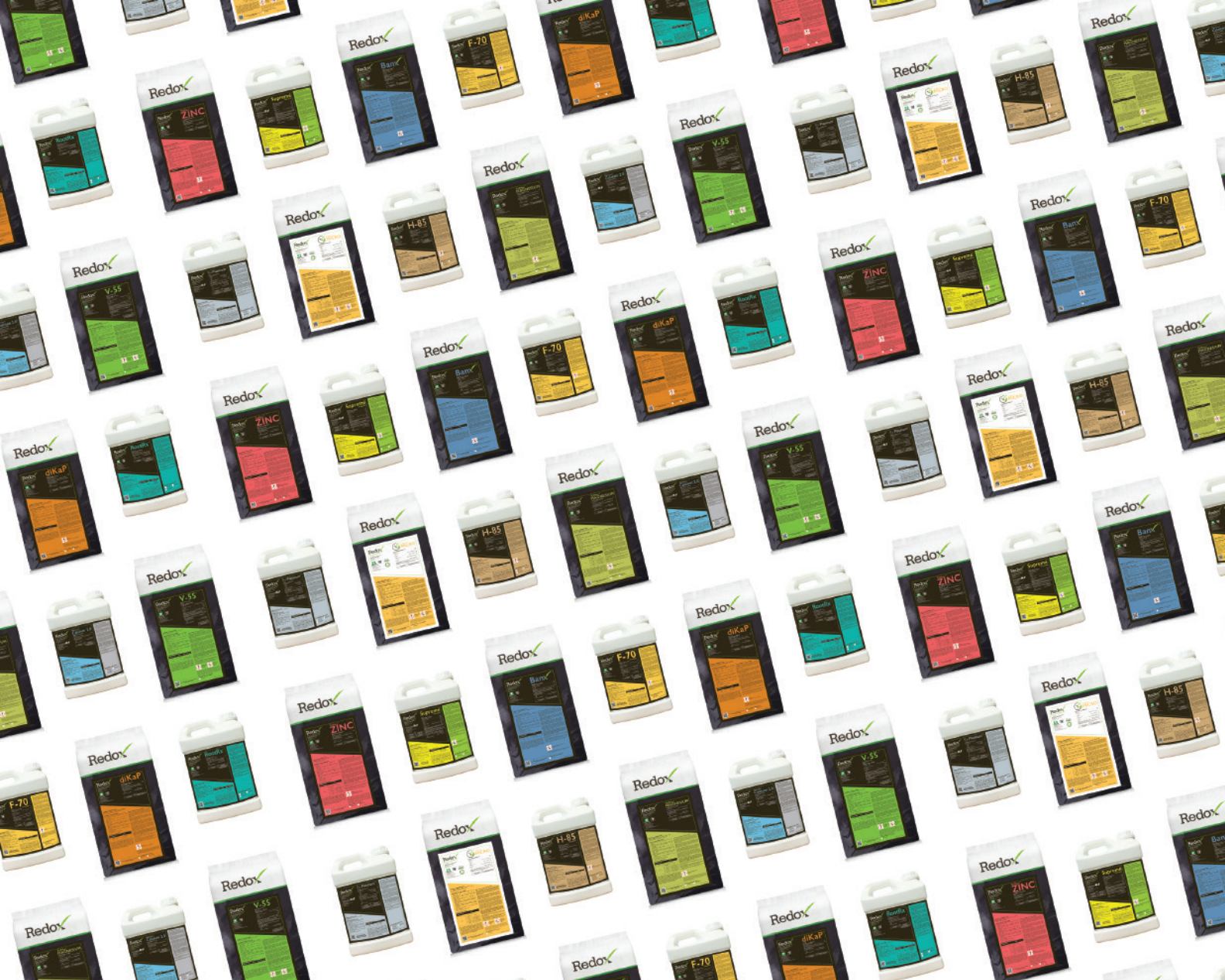
### ROOT DEVELOPMENT

-  Mainstay™ Calcium
-  Mainstay™ Si

### NUTRIENT EFFICIENCY

-  H-85™
-  Mainstay™ Calcium
-  Mainstay™ Si
-  PeneCal™
-  TriPlex™ Micro
-  TriPlex™ Zinc





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# PRODUCT OVERVIEW



0-0-18

**GUARANTEED ANALYSIS**

Soluble Potash ( $K_2O$ )..... 18%




DERIVED FROM POTASSIUM HYDROXIDE

**ALSO CONTAINS NON-PLANT FOOD INGREDIENT(S)**

**GUARANTEED ANALYSIS - SOIL AMENDING INGREDIENT(S):**

50% ..... Humic Acid from Leonardite



 **H-85™** is a multi-extraction humic and fulvic acid that contains short-, medium-, and long-chain soluble carbon molecules.  **H-85™** is soluble across a broad pH range, improving soluble carbon availability in all soil types. The availability of soluble carbon across a broad pH range increases soil microbial diversity and soil health. When combined with synthetic nitrogen,  **H-85™** will increase nitrogen efficiency by at least 25%.

## PRODUCT USAGE

Water Penetration	Apply 0.5-2 lbs./acre as a soil application every 1 to 4 weeks.
Soil Health	Apply 0.5-2 lbs./acre as a soil application every 1 to 4 weeks.
Root Growth	Apply 0.5-2 lbs./acre as a soil application every 1 to 4 weeks.
Nitrogen Efficiency	Apply 0.5-2 lbs./acre as a soil application every 1 to 4 weeks.





#### GUARANTEED ANALYSIS

Calcium (Ca) ..... 20%  
DERIVED FROM CALCIUM CARBONATE



**Mainstay™ Calcium** is specifically formulated to provide concentrated plant-available calcium for plant nutrition and soil structure.

#### CALCIUM NUTRITION

Redox microencapsulation allows for improved calcium uptake and movement within the plant.

#### SOIL STRUCTURE

Redox microencapsulation prevents calcium tie-up in the soil, allowing for improved soil structure.

#### PRODUCT USAGE

Fruit Firmness	Apply 0.5-5 gals./acre as a soil application or 0.25-1 gal./acre as a foliar application during early season cell division/development. Repeat every 1 to 2 weeks.
Cell Wall Strength	Apply 0.5-5 gals./acre as a soil application or 0.25-1 gal./acre as a foliar application during early season cell division/development. Repeat every 1 to 2 weeks.
Plant Nutrition	Apply 0.5-5 gals./acre as a soil application or 0.25-1 gal./acre as a foliar application during early season cell division/development. Repeat every 1 to 2 weeks.
Soil Structure	Apply 0.5-5 gals./acre as a soil application as needed. Repeat every 2 to 4 weeks.
Root Growth	Apply 0.5-5 gals./acre as a soil application as needed. Repeat every 2 to 4 weeks.



#### GUARANTEED ANALYSIS

Calcium (Ca) ..... 10%

DERIVED FROM CALCIUM SILICATE


**ALSO CONTAINS NON-PLANT FOOD INGREDIENT(S)**

#### GUARANTEED ANALYSIS


SOIL AMENDING INGREDIENT(S):

0.2%..... Soluble Silicon (Si) from Calcium Silicate

### CALCIUM & SILICON NUTRITION

 **Mainstay™ Si** is specifically formulated to provide efficient calcium and silicon nutrition. Silicon enhances the proper uptake and organization of calcium for cell wall structure.

### ABIOTIC STRESS DEFENSE

Lack of calcium and silicon nutrition leads to abiotic stress and cell wall degradation.  **Mainstay™ Si** is unique in its ability to improve Abiotic Stress Defense and increase cell wall strength.

## PRODUCT USAGE

Abiotic Stress Defense	Apply 0.5-3 gals./acre as a soil application or 0.25-1.5 gals./acre as a foliar application during early season cell division/development. Repeat every 1 to 2 weeks.
Plant Nutrition	Apply 0.5-3 gals./acre as a soil application or 0.125-1.5 gals./acre as a foliar application during the growing season. Repeat every 1 to 2 weeks.
Fruit Firmness	Apply 0.5-3 gals./acre as a soil application or 0.25-1.5 gals./acre as a foliar application during early season cell division/development. Repeat every 1 to 2 weeks.
Cell Wall Strength	Apply 0.5-3 gals./acre as a soil application or 0.125-1.5 gals./acre as a foliar application during early season cell division/development. Repeat every 1 to 2 weeks.
Drought Stress	Apply 0.25-0.5 gals./acre as a soil application or 0.25-1.5 gals./acre as a foliar application during periods of reduced water availability and higher temperatures. Repeat every 1 to 2 weeks.





#### GUARANTEED ANALYSIS

Calcium (Ca) ..... 10%

DERIVED FROM CALCIUM CARBONATE



☒ **PeneCal™** is a soil surfactant reacted with microencapsulated calcium. It reduces water surface tension while delivering calcium and water throughout the soil profile. ☒ **PeneCal™** improves soil structure, air to water relationships, and overall soil health.

## PRODUCT USAGE

Water Penetration	Apply 0.25-1.5 gals./acre as a soil application during early season. Repeat every 30 to 45 days as needed.
Salinity Management	Apply 0.25-1.5 gals./acre as a soil application during early season. Repeat every 30 to 45 days as needed.
Soil Health	Apply 0.25-1.5 gals./acre as a soil application during early season. Repeat every 30 to 45 days as needed.
Soil Structure	Apply 0.25-1.5 gals./acre as a soil application during early season. Repeat every 30 to 45 days as needed.



#### GUARANTEED ANALYSIS

Boron (B).....	2.0%
Copper (Cu).....	2.0%
2.0%.....	Water soluble Copper
Iron (Fe).....	6.0%
6%.....	Water soluble Iron
Manganese (Mn).....	6.0%
6%.....	Water soluble Manganese
Zinc (Zn).....	6.0%
6%.....	Water soluble Zinc

DERIVED FROM BORIC ACID, COPPER SULFATE, FERROUS SULFATE, MANGANESE SULFATE, AND ZINC SULFATE

TriPlex™ Micro is an L-amino acid micro-nutrient fertilizer. Redox chelation and complexing technology increases micro-nutrient availability. TriPlex™ Micro is designed with specific micronutrient ratios that improve nitrogen metabolism.

#### PRODUCT USAGE

Plant Nutrition	Apply 0.25-6 lbs./acre as a soil application, 1 to 3 times, or 0.2 - 3 lbs./acre as a foliar application, 1 to 6 times. Refer to label for water volume and foliar rates.
Rapid Growth & Cell Expansion	Apply 0.25-2 lbs./acre as a foliar/soil application every 1 to 4 weeks.
Root Growth	Apply 0.125-2 lbs./acre as a foliar/soil application every 1 to 4 weeks.
Crop Set & Sizing	Apply 0.125-2 lbs./acre as a foliar/soil application every 1 to 4 weeks.



#### GUARANTEED ANALYSIS

Zinc (Zn)..... 25%

DERIVED FROM ZINC SULFATE



**TriPlex™ Zinc** is an L-amino acid micro-nutrient fertilizer. Redox chelation and complexing technology improves zinc assimilation and movement within the plant.

## PRODUCT USAGE

Plant Nutrition	Apply 0.25-6 lbs./acre as a soil application, 1 to 3 times, or 0.2 - 3 lbs./acre as a foliar application, 1 to 6 times. Refer to label for water volume and foliar rates.
Rapid Growth & Cell Expansion	Apply 0.25-2 lbs./acre as a foliar/soil application every 1 to 4 weeks.
Root Growth	Apply 0.125-2 lbs./acre as a foliar/soil application every 1 to 4 weeks.





This document provides guidelines for the handling, mixing, and application of Redox nutritional products. **PLEASE READ PRODUCT HANDLING GUIDE THOROUGHLY PRIOR TO HANDLING PRODUCTS.** For additional information or assistance, please contact your Redox distribution sales representative.



# PRODUCT HANDLING GUIDELINES



# HANDLING INSTRUCTIONS

*FOLLOW MIXING, SPRAYING, AND STORAGE  
GUIDELINES FOR CONVENTIONAL REDOX PRODUCTS.*

## *ORGANIC PRODUCT GUIDELINES*

- Shake liquid products well before adding to the tank.
- If a jug is only partially used, ensure that the lid is put tightly back on in a timely manner.
- Our organic products are guaranteed for one year on the shelf.
- For best results, use size 50 mesh filters.

## *ARE YOU REDOX READY?*







- Always jar test.
- Proper hydration is essential for all applications.
- For best results, allow sufficient time for product mixing.
- Warm water accelerates the process.
- Allow more mixing time when using cold water.
- Proper care and cleaning of equipment is essential.
- Thoroughly rinse equipment after use.





## REDOX RECOMMENDED STORAGE

- Redox recommends storage of ALL PRODUCTS in a dry ambient climate, out of direct sunlight.
- To maintain product quality, storage temperatures should be between 50°F & 90°F.
- Do not stack palletized products.
- Strictly adhering to Redox storage recommendations will ensure product efficacy and performance.
- If you have a question about the storage, disposal, or shelf-life of Redox product, contact your local Redox representative or call 1-208-678-2610.

PRODUCT	EC (mS/cm) at 1%	pH	SPECIFICATIONS
 H-85™	2.77	pH 1%	10.0 - 11.0
 Mainstay™ Calcium	0.09	pH direct	7.5 - 9.5
 Mainstay™ Si	0.12	pH direct	9.5 - 11.0
 PeneCal™	0.05	pH direct	7.0 - 8.0
 TriPlex™ Micro	6.54	pH 1%	2.2 - 3.0
 TriPlex™ Zinc	5.24	pH 1%	2.4 - 2.9

*“pH 1%” indicates 1% solution by weight in deionized water.*

The logo features the word "Redox" in a bold, black, sans-serif font. A green leaf-like graphic element is positioned behind the "x". Below "Redox" is the text "BIO-NUTRIENTS" in a smaller, green, sans-serif font.

# Redox

BIO-NUTRIENTS

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