

# APPLICATION GUIDE

# HIGH PERFORMANCE LIQUID CALCIUM WITH THIOSULFATE SULFUR





## Tessenderlo Kerley International's liquid fertilizers deliver liquid precision to the crop: more precise application and more efficient nutrient uptake.

- Active Thiosulfate is a versatile technology with double action: it brings a key nutrient and acts as an activator enhancing the uptake of other nutrients, thus optimizing overall fertilizer efficiency.
- We bring a new generation of liquid fertilizers innovative products for more precise and environmentally responsible yield & crop quality improvement.

#### The importance of calcium

Calcium is an essential element in all plants and is associated with the plant structure. An adequate supply of calcium is essential for producing high quality crops with good resistance to storage and transport.

- Calcium contributes to root development and cell walls.
- Calcium has an important function with other cations (potassium and magnesium) in the neutralization of organic acids and in terms of ensuring the stability of the cell walls.
  It also participates in various enzymatic reactions and in nitrogenase activity.
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## CaTs<sup>®</sup> is a clear liquid fertilizer containing calcium and sulfur that reduces the harmful effects of salt, such as sodium, in the soil, and it can work as a soil amendment.

- Multipurpose: brings key nutrients and acts as soil amendment
- Boosts crop quality: consistency, crop color and shelf life
- Delivers 100% readily available calcium and sulfur
- Liquid fertilizer without nitrogen or chloride
- Enhances root growth

## INTRODUCTION

CaTs is a neutral to basic, chloride-free, clear solution, containing 6 % calcium and 10 % sulfur. A liter of CaTs contains 75 grams of calcium (Ca) and 125 grams of S in the thiosulfate form (thiosulfate sulfur). CaTs may be applied by drip, micro-sprinkler, sprinkler, flood irrigation, pivot system, surface broadcast, banded or watered in. It may be blended with other fertilizers, or applied as a foliar treatment on selected crops. When used as a foliar fertilizer, CaTs should first be diluted with water before applying.

CaTs may be applied to a wide variety of crops. The calcium requirement for most crops increases during periods of rapid growth and early fruit development. CaTs is an effective water-soluble source of calcium and thiosulfate sulfur which aids in the correction of these nutrient deficiencies in crops.

CaTs may be used as a fertilizer and as a soil amendment. As a soil amendment, CaTs may be used to improve water infiltration and aid in the leaching of harmful soil salts.

## **BENEFITS OF CATS**

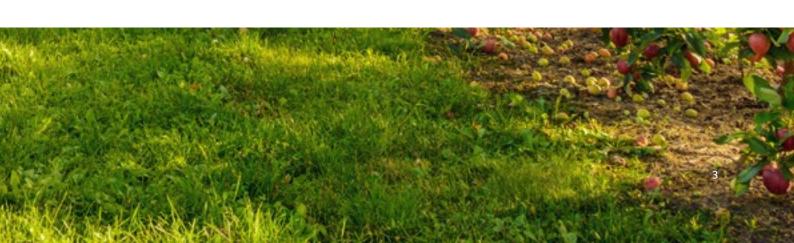
- Improves firmness of fruits and vegetables
- Improves cell structure and plant strength
- Increases yield and shelf life
- Reduces bruising
- Balances the soil allowing better water infiltration
- Solubilizes soil nutrients (calcium, potassium, magnesium, iron and manganese)
- Leaches out harmful salts

#### Liquid fertilizer benefits

- Easy to handle and safe to use
- Cost effective with uniform field application
- Fully compatible with irrigation systems and sprayers
- Reduced environmental impact compared to conventional fertilizers
- Does not plug drip lines or spray nozzles
- Uniform field application
- Liquid precision- ideal for localized application

#### Active thiosulfate benefits

- Enhances crop protein and chlorophyll content
- Assists the synthesis and functioning of enzymes in the plant
- Optimizes fertilizer efficiency by stabilizing nitrogen
- Improves availability of nutrients in the soil, particularly phosphorus and micronutrients and their uptake by the crop
- Energy efficient assimilation in the plant
- Beneficial soil microorganism interaction
- Provides prolonged sulfur nutrition
- A controlled and localized pH adjustment effect in the soil



## SUMMARY OF APPLICATIONS

- Compatible with open field cultivation as well as cultivation under covers in tunnels and in greenhouses.
- Can be applied via drip irrigation, micro-sprinklers, sprinklers and pivots, soil injection and foliar applications.
- Suitable for use in all crops.
- CaTs applications should be based on an analysis of the soil, and plant tissue (leaf and/or fruit) that provides information on the amount of calcium present. Be sure to follow established recommendations for crops based on local conditions, type of soil, crop and yield potential. In addition, the recommendations in this document are a guide only: the rates must be adjust for each local conditions.

## COMPATIBILITY

CaTs is compatible with most fertilizer solutions within normal concentration ranges. CaTs is not compatible with phosphate, sulfate and ammonium thiosulfate fertilizers. Before mixing with pesticides perform compatibility test and read pesticide label carefully.

## **SPECIFICATIONS**

- Ca (w/w)	6%
- S (w/w)	10%
- pH range	6.5 - 8.8
- Density range (at 25°C)	1.22 - 1.26

## TYPICAL PROPERTIES

- Appearance/color	Clear and colorless
- Recommended minimum storage temperature	0°C
- CaO (w/w)	8.4%
- SO <sub>3</sub> (w/w)	25%
- Ca (g/l)*	75
- S (g/l)*	125
- CaO (g/l)*	105
- SO <sub>3</sub> (g/l)*	312
- Chemical formula	CaS <sub>2</sub> O <sub>3</sub>

\*Based on a typical density (at 25°C) of 1.25 kg/l



## FERTIGATION

Fertigation is the practice of injecting soluble fertilizers through irrigation systems using water as a nutrient delivery system to the crop. Before injecting CaTs into an irrigation system, make sure that the irrigation system is in good condition and provides uniform distribution to the field. Application of nutrients like CaTs should be made in the middle third or second half of an irrigation set.

The injection of CaTs should be done slowly, and should last at least as long as it takes irrigation water to travel from the point of injection to the last emitter or sprinkler in the field.

- The injection of CaTs should be done with a fertilizer injection pump and should be done over a 1 to 4 hour time period
- Rapid injection of CaTs may lead to uneven distribution of fertilizer and may cause crop damage

For additional information about injection of nutrients into an irrigation system, consult with your local agronomist and review the International Fertilizer Industry Association (IFA) publication "Fertigation: A tool for efficient fertilizer and water management" (U. Kafkafi and J. Tarchitzky).

All rates listed are for established crops on medium to fine textured soils (suggested rates are for trees and vines at least four years old or older). Avoid application to new plantings until crop is well established. For sandy soils, suggested rates should be reduced by 50%. Do not apply CaTs when crops are experiencing heat or moisture stress.

#### **IRRIGATION WATER TREATMENT**

Irrigation water derived from snowmelt or rainwater may contain low levels of salts (low electrical conductivity). While this is good for crops, it can have a negative effect on water infiltration in many soils, resulting in puddling, runoff and/or soil erosion. Crops become moisture stressed during periods of high temperatures due to lack of deep moisture and/or a shallow root system. Applications of CaTs can:

- 1. Improve water infiltration
- 2. Increase deep moisture
- 3. Displace harmful salts

Application rates are dependent on field conditions.

## FLOOD AND IN FURROW APPLICATION

- Row crops: apply 50 to 140 liters of CaTs per hectare per application with irrigation water, as a source of calcium, to improve water infiltration and to reduce runoff. Apply as needed during the growing season.
- Tree crops: apply 100 to 200 liters of CaTs per hectare per application with irrigation water, as a source of calcium, to improve water infiltration and to reduce runoff. Apply as needed during the growing season.

### SPRINKLER/CENTRE PIVOT IRRIGATION

- Apples: apply 45 to 95 liters of CaTs per hectare per application. Repeat as needed to achieve calcium tissue levels desired.
- Young tree and vine crops: apply 30 to 75 liters of CaTs per hectare per application. Repeat as required.
- Mature tree and vine crops: apply 45 to 95 liters of CaTs per hectare per application. Repeat as required.
- Potatoes: apply 95 to 140 liters of CaTs per hectare per application beginning at hooking stage. Apply a second application when the potatoes are about golf ball size.
- Onions: apply 95 to 115 liters of CaTs per hectare beginning after third leaf stage. Apply two to three times with at least one week intervals.
- Alfalfa: apply 95 liters of CaTs per hectare after the first cutting and again after the third cutting.
- Other crops: apply 45 to 95 liters of CaTs per hectare per application. Repeat as required.
- Ornamentals: apply 10 liters of CaTs per 1000 square meters in irrigation water to growing plants. Rinse off any contact with foliage immediately.
- Turf: apply CaTs in irrigation water at 5 to 10 liters per 1000 square meters. Apply as needed.
- Tobacco: apply 50 to 100 liters of CaTs per hectare with a minimum depth of 1.25 cm of water (125,000 liters per hectare) based on tissue analysis. Repeat four or five times during the growing season as needed.

## **DRIP IRRIGATION**

CaTs has been specifically developed for use in fertigation and the product has all the necessary characteristics to be ideal for this application. Calculations for specific solution concentrations are given below. A typical scenario is that a nutrient solution of 80 mg Ca per liter requires a stock solution of 21.3 | CaTs per 100 liters of water, injected at a rate of 0.5%.

For scenarios not described in the table, the following formulae can be used to calculate the relevant solution concentrations:

- Nutrient solution (Ca ppm or Ca mg/l) = 7.5 x concentration of stock solution (I CaTs per 100 | water) x % injection rate
- Stock solution (I CaTs per 100 | water) = 0.133 x concentration of nutrient solution (ppm Ca or mg Ca/I)/% injection rate

NUTRIENT SOLUTION (Ca ppm or Ca mg/L)	STOCK SOLUTION (L of CaTs per 100 liters of water) at an injection rate of		
	1%	0.8%	0.5%
20	2.66	3.33	5.32
40	5.32	6.65	10.64
60	7.98	9.98	15.96
80	10.64	13.30	21.28
100	13.30	16.63	26.60
120	15.96	19.95	31.92
140	18.62	23.28	37.24
160	21.28	26.60	42.56
180	23.94	29.93	47.88
200	26.60	33.25	53.20

#### Young tree and vine crops

Apply 30 to 80 liters of CaTs per hectare per application during the growing season. Allow 10 to 14 days between applications.

#### Mature tree and vine crops

Apply 50 to 100 liters of CaTs per hectare per application. Repeat four or five times during the growing season or as needed. Allow 7 to 8 days between applications.

#### Vegetable and row crops

Apply 30 to 50 liters of CaTs per hectare per application. Repeat four to five times during the growing season as needed.

#### Bananas

Apply 30 to 60 liters of CaTs per hectare per application during the vegetative growth until flowering. Allow 10 to 14 days between applications.

#### Small fruits (berries)

Apply 4 to 5 times during the growing season as needed.

Vegetative growth to flowering: apply 15 to 25 liters of CaTs per hectare per application. Allow 15 days between applications. Flowering onwards: Apply 30 to 45 liters of CaTs per hectare per application. Allow 7 days between applications.

#### Flowers

Apply 30 to 50 liters of CaTs per hectare per application during the growing season. Use four or five applications spread uniformly over the growing season within a year.

#### Tobacco

Apply 10 to 50 liters of CaTs per hectare per application based on tissue analysis. Repeat four to six times during the growing season as needed, starting just after planting.

## DIRECTIONS FOR USE OF CATS IN DRIP IRRIGATION

To get the best results from CaTs in fertigation programs using injection of stock solutions, the guidelines below should be followed:

- Add ½ of water to tank, begin stirring.
- With highly alkaline water (pH > 8), it is recommended to first neutralize the stock solution to pH 7 before addition of CaTs.
- Add recommended amount of CaTs followed by the other compatible liquid N and P sources.
- Add compatible micronutrients, followed by flowable materials, then by emulsifiables and finally any soluble powders and/or water soluble fertilizers. (All should be pre dispersed in water before adding to the tank solution.)
- Complete filling of tank to desired volume and continue circulating prior to and during injection.
- Flush equipment after usage.
- It is highly recommended to conduct a small scale trial to check the compatibility of the mixture before large scale operation and injection into the irrigation system.
- Always refer to instructions for use and precautions given for the product.

OPTIMAL CA CONTENT IN LEAVES (% IN DRY MATTER)		
Apple, pear	1.5 - 2.1	
Stone fruits	2.5 - 3.5	
Citrus (orange)	3 - 5.5	
Mango	0.75 - 1.62	
Grapes*: petiole (flowering/veraison)	2 - 4	
: leaf blade (flowering/veraison)	1.8 - 2.6/2.5 - 4	
Pistachio	1.9 - 4	
Kiwi	0.6 - 1.1	
Pineapple (hybrid MD-2, on D leaf)	0.3 - 0.4	
Banana (third youngest lamina)	0.65 - 1	
Melon (fifth leaf from the apical end)	2.5 - 3	
Watermelon (fifth leaf from the apical end)	1.7 - 3	
Coffee	0.8 - 1.6	

\* Leaf samples should be taken from the half sup part of the shoot, always at the same moment in the day , with the kind of weather to allow effective comparisons to be made.

## FOLIAR APPLICATION OF CATS

Apply in sufficient volume to achieve good plant coverage, usually 200 to 300 liters per hectare for row crops. Only use spray nozzels recommended for foliar applications.

#### Alfalfa

Apply 20 to 40 liters of CaTs per hectare per application. Apply on stubble of previous cutting.

#### **Dry Peas**

Apply 10 to 15 liters of CaTs per hectare per application at 1/10<sup>th</sup> bloom stage.

#### Lentils

Apply 10 to 15 liters of CaTs per hectare per application at 1/10<sup>th</sup> bloom stage.

#### Onions

Apply 60 to 80 liters of CaTs per hectare after the 3<sup>rd</sup> leaf stage when crop is well established. Apply two to four times during the season.

#### **Grape vines**

Apply 5 to 10 liters of CaTs per hectare per application after flowering. Dilute with a volume of 100 to 600 liters of water per hectare.

#### Other Crops (including fruit trees, small fruits, vegetables and field crops)

Apply 5 to 10 liters of CaTs per hectare per application. Repeat applications as required (up to four or five applications at 10 days intervals).

For calcium related disorders in tree crops, begin applications at petal fall.

#### Apples (Gala and Red Delicious)

Apply 5 to 7 liters of CaTs per 1000 liters per hectare. Apply four to six times during the growing season.

#### Pears (Bartlett, D'Anjou, Bosc, Concord and Arirang Asian)

Apply 10 to 25 liters of CaTs per 1000 liters per hectare. Begin application at petal fall and continue through the season for four to six applications appropriately spaced during fruit growth.

#### Cherries

Apply 5 to 7 liters of CaTs per 1000 liters per hectare beginning at petal fall. Apply every 7 to 10 days up to four times or at the beginning and during a rainfall to reduce cracking.

#### Pineapple

Before floral induction: apply 15 to 60 liters of CaTs per hectare per application in a water volume of 2300 l/ha. Applications can be made every 14 days starting 3 to 4 months after planting until floral induction (apply via a boom sprayer). After floral induction: apply 20 to 40 liters of CaTs per hectare per application in a water volume of 2300 l/ha. Applications can be made 2, 3 and 4 weeks after floral induction (apply via a boom sprayer).

#### Banana

Apply 0.75 to 1.5 liters of CaTs per hectare per application in a volume water of 23 l/ha (3 to 4 % commercial product concentration). Applications can be made every 14 days throughout the crop cycle (vegetative and reproductive).

#### Pistachio

Apply 4 to 6 liters of CaTs per hectare in 2000 liters of water at fruit set and then 15 days later.

#### Flowers

Apply 20 liters of CaTs per hectare per application. Repeat four times during the growth period or as needed. Allow 10 to 14 days between applications.

#### Coffee

Apply as a 0.5 - 1% concentration of CaTs. Repeat up to four times, with the first application pre-flowering, the second post-flowering and then at intervals of one month.

#### ALWAYS CONSULT WITH AN EXPERT if intending to apply foliar CaTs with a crop oil spray, or shortly before and/or after an oil spray.

Combination of other fertilizers and pesticides with CaTs may increase the chances of foliar burn. It is beyond the capability of Tessenderlo Kerley International to test all combinations of foliar fertilizers and/or pesticides. The dealer/grower should conduct a test plot when applying with multiple products before beginning large-scale applications. When mixing with unfamiliar products, always do a jar test to check compatibility between all products. Caution: foliar application of CaTs during bloom may in some tree crops lead to flower thinning.

## SOIL APPLICATION

For pre-plant treatment, apply 100 to 350 liters per hectare with irrigation water depending on the salt content in the soil that requires leaching. CaTs may be broadcast, banded or knife injected as a source of calcium and sulfur. Rates may vary between 100 to 350 liters per hectare. CaTs can be used in a program to reduce problems related to calcium disorders in tree fruit. Soil application of CaTs should be used (and is more effective) in conjunction with a foliar calcium program.

- Apples, pears, apricots, cherries, peaches, filberts: producing trees (at least 5 years old) on sandy loam soil apply 190 to 280 liters of CaTs per hectare in a 1.2 meter band under the drip line. Irrigate after application.
- Young trees, vine crops or planted to sandy soils: apply 140 to 190 liters of CaTs per hectare. Irrigate after application.
- Example: a 5 hectare orchard at 200 liters per hectare would require 1000 liters applied in a 1.2 meter band.

## **SOIL AMENDMENT**

The calcium in CaTs is 100 % soluble making it more efficient at displacing sodium that gypsum. CaTs may be broadcast or band applied to the soil surface to reduce crusting problems and improve water infiltration. Water infiltration is improved and the sodium is leached, provided sufficient water is applied. As a liquid, CaTs is easier to apply than gyspsum and an application of 40 l/ha is equivalent to 1 ton of gypsum per hectare.

For pre-plant applications to improve soil tilth and water infiltration, apply 100 to 350 liters of CaTs per hectare with irrigation water. For band applications, apply at the rate of 3 to 4 liters per hectare per centimeter of band width. (A 20 centimeter band would require 60 to 80 liters per hectare rate.)

CaTs may be used in-season as a soil amendment to reduce the harmful effects of sodium. CaTs may be applied with irrigation water or directly to the soil before irrigation. Rate of application is dependent on severity of the sodium problem, which should be determined by lab analysis. The thiosulfate in CaTs can also liberate additional calcium from soils containing chalk or lime.

## **BLENDING WITH CATS**

- CaTs is compatible with most fertilizer solutions. CaTs is not compatible with phosphate, sulfate and ammonium thiosulfate fertilizers.
- In absence of specific recommendations and data, do a jar test before mixing large quantities.
- CaTs can be blended with UAN or urea solution in any ratio to supply nitrogen.
- The addition of water to the mixture may be helpful to maintain blend stability.
- When blending with micronutrients and pesticides, trial blends should be made before mixing large amounts.
- When mixing other liquid fertilizers and/or pesticides with CaTs, the blend sequence should be as follows: water, pesticide, CaTs and/or other fertilizer.
- Blends of CaTs should not be acidified below a pH of 6.0.

### SOIL APPLICATION OF CATS: PH AND CROP PRODUCTIVITY

Soil pH has a direct effect on nutrient availability as well as soil microbial activity. A low soil pH can indicate the presence of high levels of toxic ions such as manganese, iron and/or aluminum while a high pH can indicate the presence of free lime in the soil. Most crops do best with a soil pH between 6.0 and 7.5 for optimum nutrient uptake.

Periodic testing of soils using lab analysis is the only way to determine soil pH and the appropriate course of action to maintain soils at their full productive potential. If the pH of the soil is below 6.0, please contact you Tessenderlo Kerley International Expert for further guidance. Do not use on highly acidic soils.



## PRECAUTIONS FOR USE

CAUTION: plant and leaf injury may occur on some crops when certain weather and growing conditions are present. The user assumes all risks of use and handling.

- DO NOT apply CaTs to foliage of crops sensitive (foliar burn) to sulfur.
- DO NOT use high-pressure sprays (greater than 4 bar) when applying CaTs over the top of a crop.
- Use caution when applying fertilizer to crops experiencing extreme heat or moisture stress. Fertilizers may compete with the crop for water. Crops should be adequately hydrated before applying any fertilizer.
- The total rate of fertilizer applied should be split among several irrigations and/or at lower rates per application as temperatures increase.
- Take care when applying CaTs with knife injectors or other types of fertilizer injecting equipment that may cause root pruning.
- DO NOT apply CaTs while chlorinating irrigation system. CaTs will neutralize chlorine.
- Do NOT mix CaTs with acid or acidic fertilizers below a pH of 6.0.
- Take care when injecting acids into irrigation water while injecting CaTs. If the water pH is below 6.0 or the injection point to close, the product could decompose and potentially plug drip system.
- Recommendations are for CaTs only; the addition of other fertilizers at or near the same time could increase the chance of phytotoxicity to the crop. Please allow a minimum of 7 days between injections.
- When mixing CaTs or any liquid fertilizer with pesticides always keep agitators running during filling and spraying operations. Failure to maintain agitation may cause separation of products resulting in uneven spray application.
- Many crops are sensitive to salts during germination. When soil moisture is low, delayed crop emergence and/ or phytotoxicity may occur when fertilizer is placed too close to the seed. Do not use CaTs in pop-up fertilizer when soil moisture is limited, soil salinity is above an electrical conductivity of 1.0 or when irrigation is delayed such that germination may be affected.
- Fertigation application of CaTs and other liquid or water soluble fertilizers to an established crop may cause injury to a crop if:
  - 1. Injection period is less than 60 minutes, which may cause an uneven distribution of CaTs to the crop
  - 2. CaTs rates are higher than suggested
  - 3. Ample irrigation water is not applied immediately before and after the injection of CaTs
- Crop injury may result from unusual weather conditions during foliar application (heat wave, drought, or hot drying wind), or improper application practices such as injecting fertilizer to quickly all of which are out of control of the manufacturer or seller.
- Take care when applying CaTs in drip or micro-irrigation systems where calcium and magnesium levels in irrigation water are greater than 100 ppm due to potential plugging of emitters.
- For further information contact a Certified Crop Advisor (CCA), Pest Control Advisor (PCA), fertilizer dealer or Tessenderlo Kerley International Expert.



## **GENERAL PRECAUTIONS**

Avoid prolonged or repeated contact with eyes, skin and clothing. Chemical goggles or a full face shield should be worn. To protect skin, wear appropriate protective equipment such as rubber or plastic aprons, rubber gloves and boots. Avoid breathing mist or vapour. Keep containers closed. Wash thoroughly after handling. May cause gastrointestinal distress if swallowed. For further information, consult a Material Safety Data Sheet (MSDS). To request an MSDS, send an e-mail <u>tessenderlokerley@tessenderlo.com</u>.

#### First aid

In case of contact with eyes, immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention if irritation occurs. In case of skin contact, flush skin with water. If irritation occurs, seek immediate medical attention. Remove and wash contaminated clothing before reuse. If swallowed, give large amounts of water and induce vomiting by touching back of throat with finger unless unconscious. Seek immediate medical attention.

#### Handling and storage

Minimize skin exposure. Store mini-bulks and smaller containers out of the sun in an area of moderate temperature. Do not reuse containers. Avoid containers, piping or fittings made of copper containing alloys or galvanized metal. Do not store at temperatures below 5°C as crystallization may occur. CaTs may be stored in plastic, fiberglass or stainless steel vessels. Dispose of containers in accordance with local regulations and requirements.

#### In case of spill

Contain spill and maximize recovery. Keep spill out of water sources. Exercise caution in area of spill for slippery conditions. Dispose of spilled material in accordance with regulatory requirements.

#### Phytotoxicity

Plant and leaf injury may occur on some crops when certain weather and growing conditions are present. The user assumes all risks of use and handling. Before handling this product, consult the MSDS for handling, safety and first aid information.

#### Warranty and Limitation of Damages

Crop injury may result from unusual weather conditions, failure to follow label directions, or improper application practices, all of which are out of control of the manufacturer or seller. The directions in this application guide are believed to be reliable and should be followed carefully.

While every care has been taken to ensure that the information in this publication is correct at the time of publication, Tessenderlo Group cannot give any guarantee as to its accuracy or accept any liability resulting from its use.

The purpose of this guide is to provide information about this product and to make suggestions regarding its use. This guide does not make recommendations about the amount of calcium and sulfur needed for optimum crop production. The rate of each application of CaTs should be made based on a soil test, soil release rate test and/or plant tissue analysis for calcium and sulfur, and on the recommendations of a Certified Crop Advisor, Pest Control Advisor or authorized CaTs distributor.

Seller's guarantee shall be limited to the terms in the Application Guide, and subject thereto, the buyer assumes any risk to person or property arising out of use or handling and accepts the product on these conditions.

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## SUSTAINABLE CROP NUTRITION FOR AGRICULTURE

For over 100 years Tessenderlo Kerley International has demonstrated its commitment to nurturing crop life through innovation, research and the development of novel fertilizers for a more sustainable agriculture. Our diverse product portfolio addresses the challenges of modern agriculture by delivering essential nutrients in forms that protect soil health and optimize nutrient use efficiency.

## We provide an extensive range of both liquid and solid/soluble fertilizers





#### Our experts are familiar with your region and crops. Their support includes:

- Agronomic advice
- Providing technical information
- Carrying out field studies that are specific to your issues
- Providing application and storage tips



## HIGH QUALITY SOLID/SOLUBLES



For more contact information, please get in touch with: Tessenderlo Kerley International, part of Tessenderlo Group Troonstraat 130 - 1050 Brussels, Belgium Tel. +32 2 639 18 11 tessenderlokerley@tessenderlo.com www.tessenderlokerley.com

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