

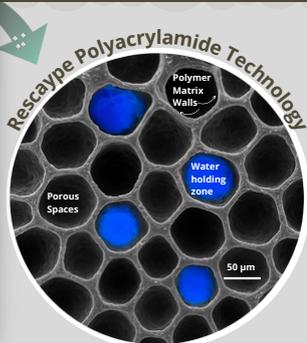


# Revive Your Soil. Reclaim Your Harvest

## What is Rescaype?

Rescaype is a food-grade, water-soluble soil conditioner made from advanced polymer (polyacrylamide) technology that improves soil structure, water retention, and plant root development.

Rescaype is safe, low-dose, and biodegradable, ideal for both traditional and sustainable agriculture.



## How Rescaype Works:

Transforms your soil in **3** powerful ways with Rescaype

### 1 Mechanically

It loosens compacted soils, increases porosity, reduces wind and water erosion, and binds small soil particles together.

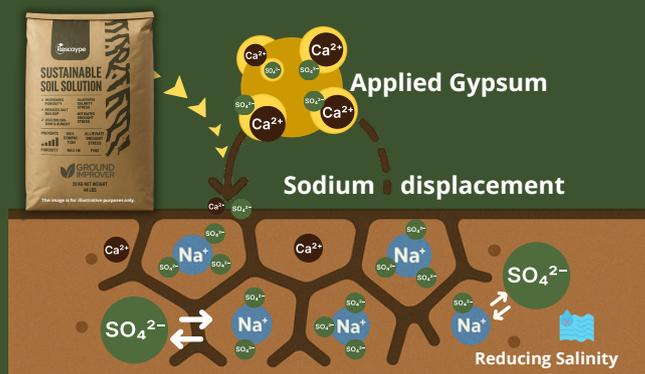
- Improved porosity boosts air and water flow to roots
- Creates stable soil structure that supports plant anchoring
- Helps break crusting for better seed germination



### 2 Chemically

It facilitates sodium displacement when applied with calcium-rich materials like gypsum, leading to a noticeable reduction in soil salinity within approximately 2 to 3 months.

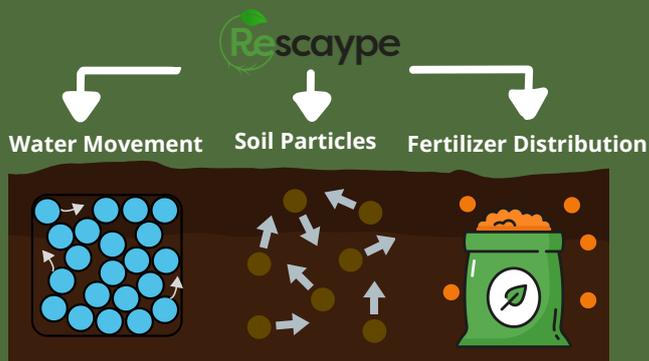
- Rescaype breaks  $\text{CaSO}_4$  (gypsum) to release reactive sulfate ( $\text{SO}_4^{2-}$ )
- $\text{SO}_4^{2-}$  binds with sodium ( $\text{Na}^+$ ) in the soil to form  $\text{Na}_2\text{SO}_4$
- $\text{Na}_2\text{SO}_4$  is water-soluble and flushed away with irrigation or rain, reducing sodium levels



### 3 Physically

It binds loose particles of water, soil, and fertilizers. This creates porosity while simultaneously reducing erosion by stabilizing the soil.

- Keeps nutrients in the root zone
- Supports steady water access to plants
- Prevents runoff and evaporation





Rescaype

# Revive Your Soil. Reclaim Your Harvest



## When to Apply:



Apply in dry and calm weather to avoid wind loss or clumping.



The ground should be dry during application.



## Best time:



Autumn  
(post-harvest)



Before/during  
sowing



Or when  
rainfall is  
expected.

Application timing should consider the crop's growth stage, not just seasonality.

Do not apply when crops are already growing, as incorporation into the soil won't be possible.

## Dosage:

### Regular Treatment:

Average 12 kg/ha (10,000 m<sup>2</sup>), adjusted by soil type, water quality, and other local conditions.



## For Better Distribution



Mix 1 part Rescaype + 2 parts gypsum or fine sand.



- Mixing should be done dry before loading into application equipment to avoid clumping.



- Ensure both Rescaype and gypsum (or filler) are completely dry before mixing to maintain uniform flow through equipment.

## Recommended Equipment :

These ensure fine and uniform spreading, essential for performance.



Fine seed spreader



Pneumatic seed drill



Agricultural drones



Plow-mounted applicators



Manual tools (small areas only)



# Revive Your Soil. Reclaim Your Harvest

Follow these **4** essential steps to ensure Rescaype is applied effectively and activated properly for optimal soil transformation.

## Step-by-Step Installation Guide:

### 1 Calibrate Your Equipment



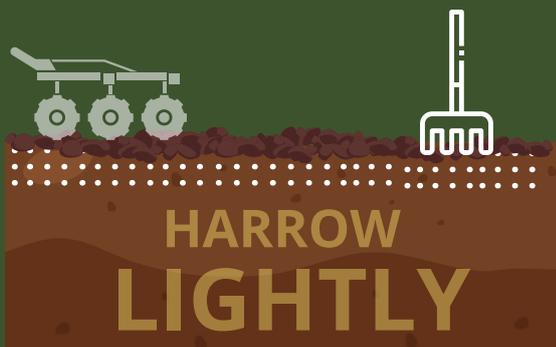
- Test a 50m section before full application.
- Adjust opening size and driving speed.

### 2 Apply Evenly



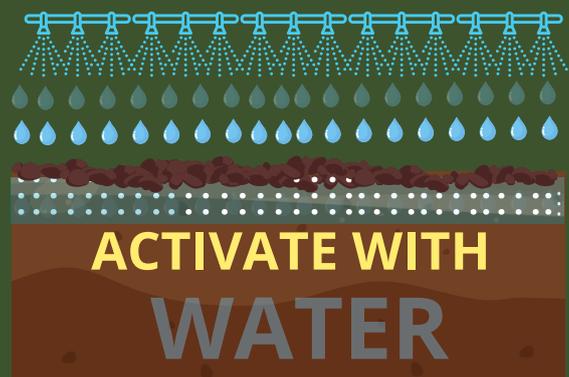
- Spread Rescaype (or the mix) uniformly across the field.

### 3 Harrow Lightly



- Incorporate into topsoil (recommended depth: 3 cm) to protect product from sunlight and improve contact with soil.

### 4 Activate with Water

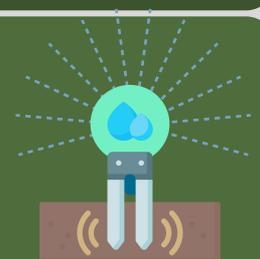


- Irrigate 3 times within 7 days or schedule before rainfall.
- Moisture is essential to dissolve and activate the product.

## Reduce Irrigation After Treatment



After Rescaype application, mechanical irrigation needs may reduce by an average of 40% (25-50% water reduction), even if sensors indicate low moisture. This applies to irrigated fields, plantations, and greenhouses.



Reduced Irrigation



# Desalination Instructions (for High-Sodium Soils)

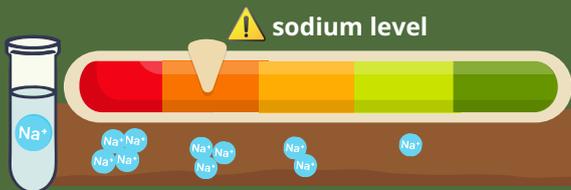
## Why?

Excess sodium in soil leads to poor structure, hard crusting, reduced water infiltration, and stunted root growth. Over time, it blocks essential nutrient uptake and damages soil health.



## Before You Start

### 1. Conduct Sodium Level Test



- Conduct a soil test to identify sodium levels (consult Rescaype Specialist for lab guidelines).

### 2. Identify Problem



- Target fields with white crusts, poor drainage, or stunted growth.

## Desalination Dosage:

- Average gypsum dosage: 2.5 tons/ha (range: 1–5 tons depending on soil salinity).

### 1. Mix & Apply (Initial Blend)

- Use 25 kg Rescaype + 50 kg gypsum per hectare
- Mix thoroughly and apply using calibrated spreader



25 kg Rescaype



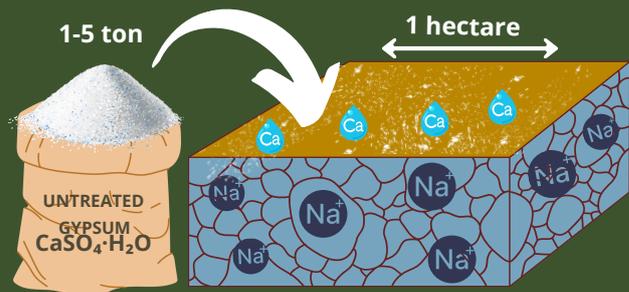
50 kg gypsum per hectare

Mix and Apply



### 2. Apply Untreated Gypsum ( $\text{CaSO}_4 \cdot \text{H}_2\text{O}$ ) Separately

- Spread 1–5 tons of untreated gypsum per hectare over the same area
- This ensures adequate calcium supply for sodium exchange



## Important Note:

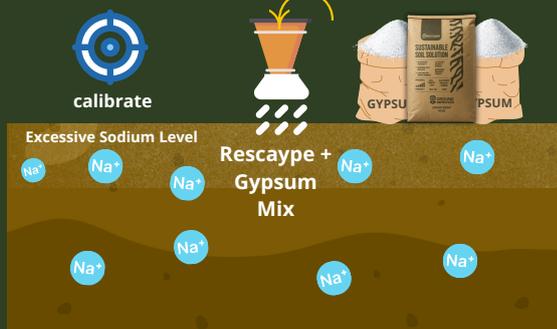
- Do not premix the large gypsum volume (1–5 tons) with Rescaype.
- Doing so can lead to clumping, uneven application, and ineffective treatment.



# Desalination Instructions (for High-Sodium Soils)

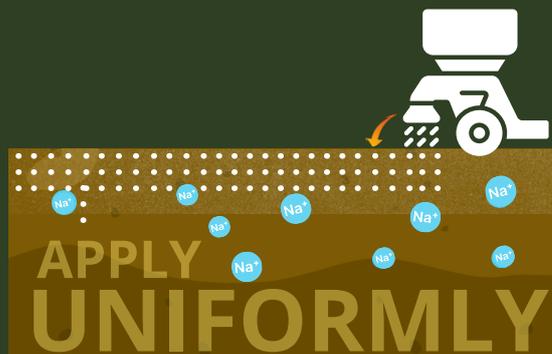
## Step-by-Step Desalination Guide:

### 1 Spread Rescaype + Gypsum Mix (for easier application)



- Mix helps spread Rescaype more evenly
- Use calibrated equipment for even distribution

### 2 Apply Untreated Gypsum Separately



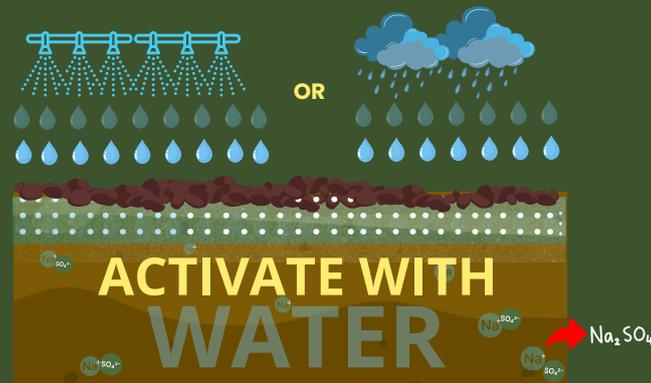
- Apply 1-5 tons untreated gypsum uniformly.  
Average dose: 2-5 tons/ha (adjust as per soil salinity).

### 3 Harrow Lightly



Lightly incorporate both into the topsoil (3-5 cm depth) using a harrow or mixing tool.

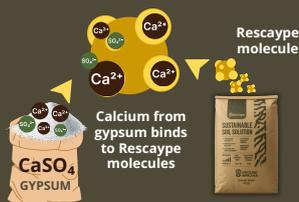
### 4 Irrigate 3 Times (or Use Rain)



Irrigate 3 times within 7 days or apply before expected rainfall to activate Rescaype.

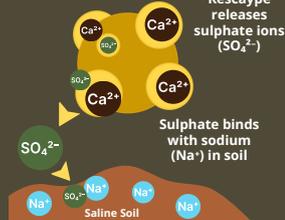
## How It Works (Chemistry Overview)

1



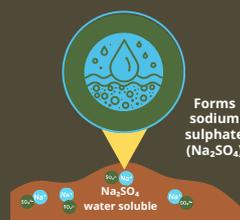
Rescaype binds calcium from gypsum ( $\text{CaSO}_4$ ).

2



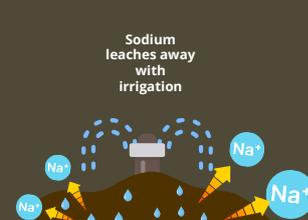
Rescaype releases sulphate, which bonds with sodium ( $\text{Na}^+$ ).

3



Sodium sulphate ( $\text{Na}_2\text{SO}_4$ ) is known to be water-soluble.

4



Sodium is leached away through irrigation or rain.

**Note:** Never wrap the plant's roots with Rescaype. It blocks oxygen and prevents the roots from breathing.

# Revive Your Soil. Reclaim Your Harvest



## Benefits of Rescayne

- Restores saline soils
- Decreases erosion and water runoff
- Reduces fertilizer leaching
- Enhances water retention and promotes root zone health



## Summary Table, Mistakes to Avoid & FAQs :

Item	Regular Treatment	Desalination Treatment
Rescayne dosage	Average 12 kg/ha	25 kg/ha
Gypsum (small)	Optional (or sand) <small>Used as a carrier to increase volume and ensure even spreading.</small>	50 kg/ha (with Rescayne)
Untreated Gypsum $\text{CaSO}_4 \cdot \text{H}_2\text{O}$ (bulk)	Not used	1-5 tons/ha (separate) <small>can use <math>\text{CaSO}_4 \cdot \text{H}_2\text{O}</math> (untreated gypsum) for cost-effectiveness or <math>\text{CaSO}_4</math> (treated gypsum); both are effective.</small>
Equipment	Spreader/Drill/Drone	Spreader/Drill/Drone
Irrigation needed (mechanical irrigation or natural rainfall)	Yes (3x in 7 days)	Yes (3x in 7 days)
Purpose	Soil structure, water retention, reduce fertiliser, increasing yields	Salt removal & soil recovery

**Note:** Same gypsum can be used in both treatments; particle size flexibility



# Revive Your Soil. Reclaim Your Harvest



## Mistakes to Avoid

- Mixing Rescaype with large gypsum quantities (1–5 tons) → prevents even application.
- Skipping irrigation → prevents activation
- Not harrowing → leaving it under the sunlight degrades Rescaype fast
- Applying during windy/wet weather → uneven spread, product loss
- Not mixing dry materials correctly → poor spread pattern



## Frequently Asked Questions

### Q: Can I mix Rescaype with fertilizers?

A: Yes, but only when both materials are dry. Avoid liquid blends unless previously tested.

### Q: How long does Rescaype stay active in the soil?

A: It begins working immediately and remains active for 2–3 years, depending on soil and irrigation practices.

### Q: Is Rescaype safe for all types of crops?

A: Yes — it is food-grade, biodegradable, and non-toxic. Suitable for all agricultural crops.

### Q: How do I know if my soil needs desalination?

A: Look for signs like stunted crops, poor drainage, or white surface crusting. Sodium levels above 150–180 ppm typically require treatment (consult your lab).

### Q: Can I apply Rescaype during rainfall?

A: No. Contact with water turns Rescaype into a slimy gel, which can clog spreading machine. Always apply dry. (Tip: Clean equipment dry with compressed air. If gelled, rinse thoroughly with water.)

### Q: What happens if I apply too much Rescaype?

A: Overapplication does not cause harm. Rescaype is water-soluble, higher doses will move deeper into the soil profile and may enhance deeper soil conditioning. However, follow recommended rates for cost-effectiveness and uniform application.

### Q: Does Rescaype replace gypsum?

A: Rescaype takes calcium from gypsum and releases sulfate. The sulfate grabs sodium and turns it into a form that dissolves in water and washes away—the result is lower sodium in the soil.

## CONTACT



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