



# LALSTIM OSMO



## For preventing frost damage and increasing quality of fruit yield

LALSTIM® OSMO contains glycine betaine, an osmolyte naturally enhancing stress tolerance in plants. Glycine betaine is absorbed quickly by the plants, where it maintains the water balance and the normal activity of plant cells during environmental stresses. LALSTIM® OSMO prevents frost damage during the flowering stage and improves the quality and storage stability of fruits.

 WETTABLE POWDER

## MODES OF ACTION

LALSTIM® OSMO protects the normal physiological activity of plant cells during stress conditions:

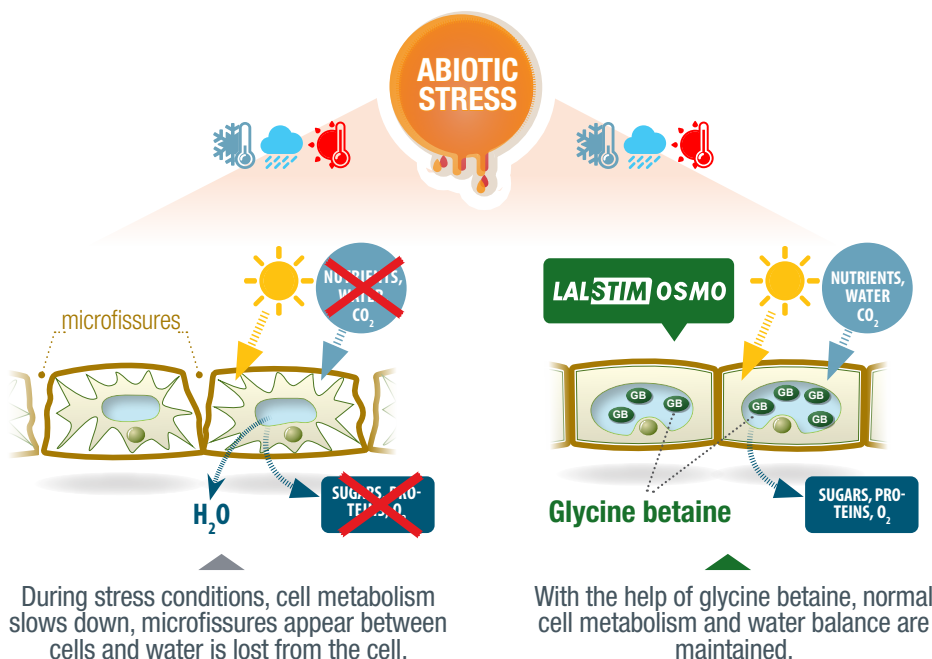
- Maintains the water balance and prevents cell damage.
- Enhances photosynthesis.
- Improves the circulatory flow of water and nutrients, especially calcium and other trace elements.

## BENEFITS

- Increases the yield production capacity in stress conditions
- Prevents frost damage during the flowering stage
- Improves the quality and storage stability of fruits

## ADVANTAGES

- Absorbed within 24 hours
- Circulates systemically throughout the plant
- Active for 3 weeks
- A protective compound naturally occurring in plants



## APPLICATIONS

CROP	TARGET	DOSE	APPLICATION TIMINGS	APPLICATION METHOD
Apple and pear	Preventing frost damage.	5–7 kg/ha	At the flowering stage, at latest 24 h before low temperatures.	Spray evenly moist. Water amount: 500–1000 l/ha.
	Improving the storage stability of fruits.	4 kg/ha	4 weeks before harvest.	

- **Compatibility:** can be sprayed together with fungicides, insecticides and foliar fertilizers, except for formulations containing copper.
- The use of adjuvant/wetting agent in open field is recommended.
- The best conditions for spraying application are during windless and rainless weather, when the relative humidity is high.
- The maximum concentration of the spraying solution: 30 g/litre

## CHARACTERISTICS

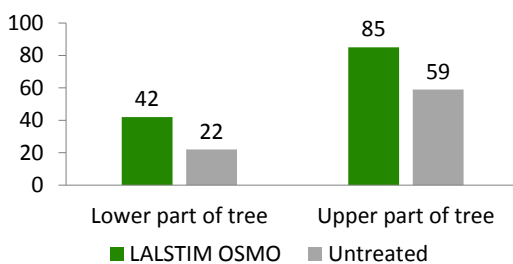
- **COMPOSITION:** purified and crystallized glycine betaine from plant origin (97 %)
- **FORMULATION:** wettable powder
- **PACKAGING:** 2 kg
- **STORAGE:** 24 months at room temperature, in an unopened package
- **SUITABLE FOR ORGANIC AGRICULTURE**

## RESULTS

### Preventing frost damage of flowers and unripe fruits

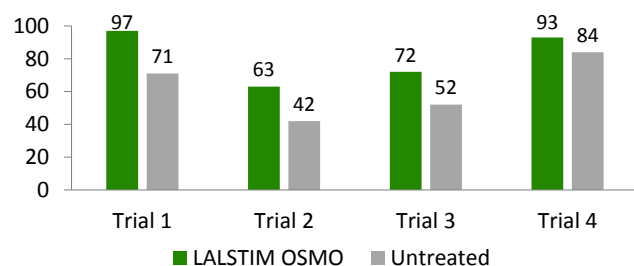
LALSTIM OSMO spraying during flowering reduced frost damage on unripe pear fruits. The lowest temperature during flowering was -2.7 °C. (PC Fruiteelt, Belgium)

Unripe fruits without frost damage (%)



LALSTIM OSMO spraying reduced frost damage on pear and apple flowers. The lowest temperature during flowering was -3.7 °C. Trials 1-3 on pear and trial 4 on apple. (PC Fruiteelt, Belgium)

Flowers without frost damage (%)



### Improving the storage stability of fruits

LALSTIM OSMO spraying (4 kg/ha) one month before harvest maintained the good coloring and uniformity of apples during storing (cv. 'Opal'). Pictures have been taken after 3 months of storing.

