

LALSTIM OSMO



WETTABLE
POWDER

For preventing frost damage and improving the quality of stone 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 on fruit trees during the flowering stage, prevents fruit cracking and improves the storage stability of fruits.

MODES OF ACTION

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

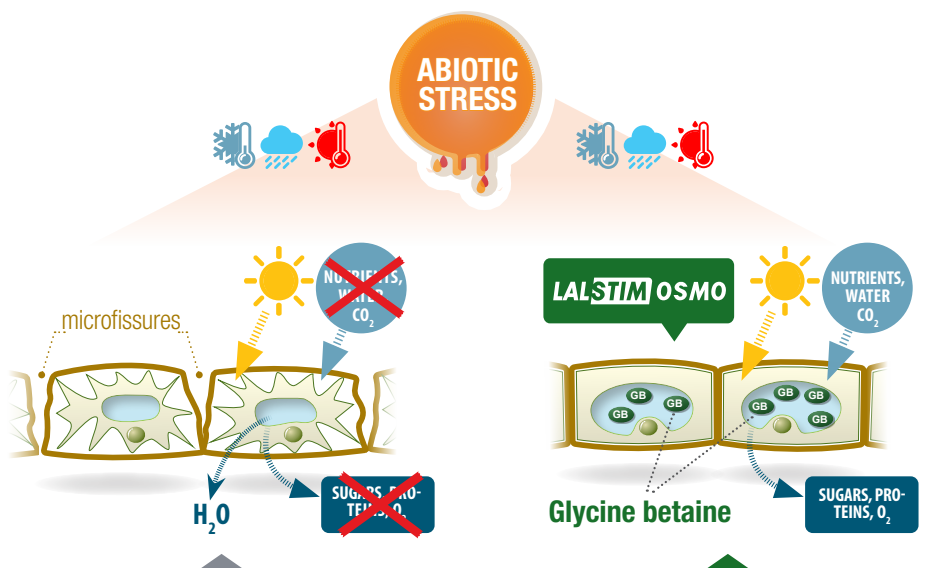
- Maintains the water balance and prevents cell damage.
- Enhances photosynthesis.
- Improves the circulatory flow of water and nutrients, especially calcium and other trace elements.

BENEFITS

- Prevents frost damage during the flowering stage
- Prevents cracking of fruits
- 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



During stress conditions, cell metabolism slows down, microfissures appear between cells and water is lost from the cell.

With the help of glycine betaine, normal cell metabolism and water balance are maintained.

APPLICATIONS

CROP	TARGET	DOSE	APPLICATION TIMINGS	APPLICATION METHOD
Cherry, plum and apricot	Preventing frost damage.	5–7 kg/ha	At the flowering stage, at latest 24 h before low temperatures.	Spray plants evenly moist. Water amount: 400–1000 l/ha.
	Preventing cracking and improving storage stability of fruits.	First treatment: 4 kg/ha	Cherry: at the early fruit coloring stage. Others: 4 weeks before harvest.	
		Second treatment: 2–4 kg/ha	2 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

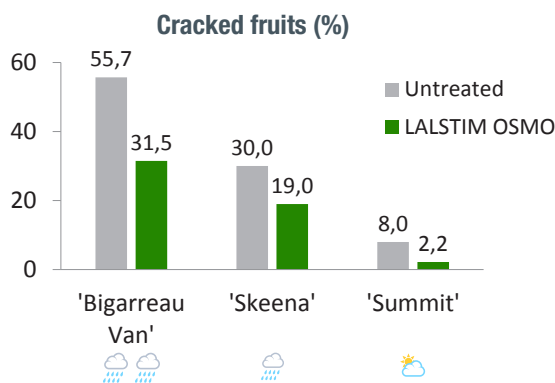
CHARACTERISTICS

- **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**

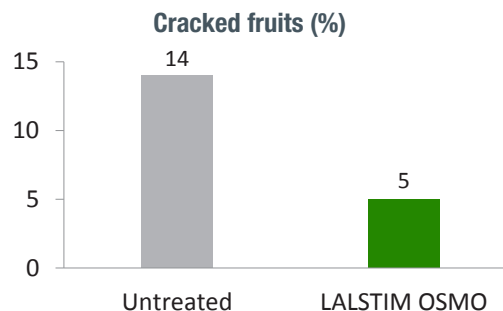
RESULTS

Preventing fruit cracking

LALSTIM OSMO sprayings before harvest reduced the cracking of cherries on average 15 %. Heavy rainfall during the growing season increased the cracking susceptibility of cherries.



LALSTIM OSMO spraying before harvest reduced the cracking of apricots (cv. Magic Cot').



Improving the quality and storage stability of fruits

LALSTIM OSMO spraying increased the sugar content and firmness of cherries (cv. 'Skeena').

	Brix value	Firmness (g/mm)
LALSTIM OSMO	19,4	343
Control	17,4	302

LALSTIM OSMO spraying at the ripening stage improved the storage stability of plums (cv. 'Mirabelle'). Photos have been taken after 30 days of cold storing.

