LALSTIM OSMO

For improving quality of grapevine 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 cracking and improves the shelf life of grapes. Also reduces the negative effects caused by high temperature and drought stresses.





MODES OF ACTION

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

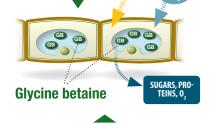
- Maintains the water balance and prevents cell damage.
- Enhances photosynthesis.
- Improves the circulatory flow of water and nutrients, especially calcium and other trace elements.

BENEFITS

- Prevents cracking of grapes
- Improves the visual quality and shelf life of grapes
- **Reduces the negative effects** caused by temperature and drought stresses



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.

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
Grapevine	Preventing cracking and improving shelf life.	First treatment: 4 kg/ha	Approx. 4 weeks before harvest, when grape clusters are almost fully developed.	Spray plants evenly moist. Water amount: 400–1000 l/ha. Spraying single grapevines: Spray plants evenly moist, concentration 6 g/l.
		Second treatment: 2–4 kg/ha	Approx. 2 weeks before harvest, when color of grapes is starting to change.	

- 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

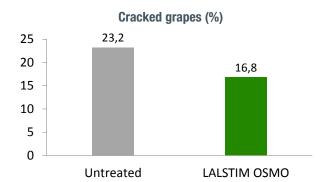
CHARACTERISTICS

- **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

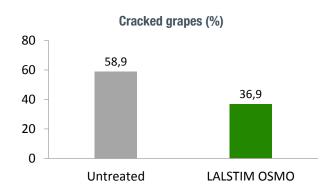
RESULTS

Preventing cracking of grapes

LALSTIM OSMO spraying during the ripening stage reduced the number of cracked grapes (cv. 'Alphonse Lavallée').



LALSTIM OSMO spraying during the ripening stage reduced the number of cracked grapes (cv. 'Ugni Blanc').



Effect on grape size

LALSTIM OSMO spraying during the ripening stage increased the average weight of grapes (cv. 'Alphonse Lavallée').

Average weight of grapes (g)

LALSTIM OSMO

7,6

Control

7,3





