

OSMOREGULATOR Biostimulants and Osmolyte

ACTIVE GROW® SPLIT FIX is a novel product that combines biostimulant qualities of Undaria pinnatifida Brown Kelp with and Trimethylglycine (TMG).

These ingredients are potent antioxidants, combined to help reduce abiotic stress in plants.



PROTECTION OF HIGH VALUE FRUIT

Two main components of ACTIVE GROW® SPLIT FIX work together to nourish the plant, improve abiotic stress resistance and improve plant recovery by reducing oxidative damage.

ACTIVE GROW® SPLIT FIX CONTAINS:

Undaria pinnatifida extract, Trimethylglycine, Osmolytes

BENEFITS OF USAGE

- Reduces fruit splitting due to rain events prior to harvest.
- Improves plant growth in areas where high salinity is present.
- Reduces cold weather stress in early season.
- Reduce salt wind damage in areas close to the ocean.
- Extracted of fresh seaweed at ambient temperature to retain higher levels of plant metabolites and nutrients.

 No KOH is used, yielding acidic extract.
- Made with Seaweed Undaria pinnatifida from New Zealand cold, clean and clear sea.

Control



Treated



Splitting %





Control

Treated

ACTIVE GROW® SPLIT FIX applied to Sauvignon Blanc Vines in late harvest achieved splitting reduction of 45%. Independent trial performed in Blenheim, New Zealand, 2017

VARIOUS MODES OF ACTION

ACTIVE GROW® SPLIT FIX is mainly an osmolyte. Osmolytes help maintain cellular fluid balance by interacting with water molecules. As a highly efficient osmolyte, seaweed combined with high amounts of TMG accumulates in cells protecting them from osmotic stress and dehydration by maintaining their water and ion balance.

Optimal cell functions are consequently maintained during periods of osmotic stress. Maintaining water bal-

ance in cells is an energy consuming process. Thus ACTIVE GROW® SPLIT FIX spares valuable metabolic energy which can be used for other metabolic processes such as growth or fruit production.

A secondary mode of action is a well documented ability of seaweed extract to strengthen and thicken a plant cell wall. A thicker cell wall can help the plant to reduce transpiration, increase resistance to cold weather stress.





SUGGESTED APPLICATIONS RATE

FOLIAR APPLICATION

General recommendation:

4-7.5 l/ha 2-5 applications per growth season.

Field crops: 2-5 l/ha 3-4 times.

Pasture: 2-5 l/ha. Dilute 1:100 up to

1:200.

Viticulture: Spray 2 – 5 l/ha at 20-30cm cane, at 40-60cm cane, at prebloom and then every second week. Apply 5 l/ha per season in the Fall.

Cherries - for split reduction:

5 I/ha every 7-10 days from early colour change through to 5 days pre-harvest.

Grapes – for early season, cool temperature stress reduction:

1.5 I/ha, 2 weeks after bud break, increasing the rate with each application up to 4 I/ha at pre-flower. Based on 2.5M row spacing.

MAIN COMPONENTS:

- Amino acid Osmolyte
- Seaweed Extract (from Undaria pinnatifida, a brown kelp from New Zealand cold and clean sea)

Dry Matter: 47.7%

Composition	mg/l*
N	5%
Mg	100ppm
Ca	100ppm