LET'S USE LESS
PACKAGING
MAIN TABLE GRAPES CONDITION DEFECTS

DEHYDRATION

BLEACHING

DECAY

MECHANISMS TO CONTROL POST-HARVEST DEFECTS

DEHYDRATION:
Use of packaging with adequate ventilation to permit fast cooling and maintain a high-humidity environment during storage and transportation.

SLIP SKIN/DECAY:
Proper application of fungicides and pre-harvest handling; use of sulfur dioxide generators during post-harvest.
WHAT IS SMARTPAC?

SMARTPAC is a packaging system that releases sulfurous anhydride, protecting the fruit and extending its shelf life; it simplifies and accelerates the packing process, contributes to a faster fruit cooling process and provides a high relative humidity environment, resulting in a better preservation of the product. Additionally, SMARTPAC is the only SO₂-generating device that can be recycled after using.

“SMARTPAC allows us to reach more remote and diverse markets with a healthy, firm and fresh fruit.”

SMARTPAC is the most efficient, effective and friendly way to pack your fruit.
**THE SMALL DIFFERENCE**

**SMARTPAC** bag or wrap is an active container with built-in sodium metabisulfite which, in contact with the fruit's humidity, will release sulfur dioxide in a homogeneous and constant manner to control decay; it generates the high-humidity condition required by the fruit to remain fresh.

**MULTI-LAYER TECHNOLOGY**

- **INNER LAYER**
  - PE permeable layer

- **MIDDLE LAYER**
  - PE + MBS (active ingredient)

- **OUTER LAYER**
  - PE impermeable layer

**MICROSCOPIC CUTTING**
TRADITIONAL PACKAGING

The traditional system uses a combination of devices and layers to protect the fruit, slowing down the packing, cooling and sulfur dioxide diffusion processes, increasing labor, cooling and storage costs, and requiring greater SO2 emissions to pass through these layers and to control Botrytis.
BOX, BAG AND FRUIT. WITH SMARTPAC, PACKING IS THAT SIMPLE

A quick and seamless packing, more homogeneous temperature and \( \text{SO}_2 \) concentrations inside the box, and better control of dehydration are some of the advantages of this technology.

Releasing \( \text{SO}_2 \) from all 6 box faces generates a uniform environment that protects the fruit from a localized exposure that could result in harm.
SMARTPAC BAG

The SMARTPAC bag is the most complete and efficient packaging solution. It considerably accelerates packing speed, protects fruit from dehydration and decay, improves fruit presentation and does not generate dump wastes.

Its multi-layer technology enables a homogeneous and controlled release of sulfur dioxide, providing a lasting protection and preventing excess concentration of gas that could harm the fruit.
SMARTPAC WRAP

This film is intended to wrap the fruit or its primary packaging, punnets or clamshells, generating a physical barrier that protects the fruit while releasing sulfur dioxide through its entire surface. It is a highly efficient solution for packing and pre-cooling processes.

For extra dehydration control, can be used in combination with a standard perforated liner.
SMARTPAC FILM

This plastic film releases SO₂ through its entire surface, achieving greater homogeneity in the distribution of sulfur dioxide inside the box. Since it is a plastic film, it has a controlled permeability for SO₂ release and does not require absorbing pad. It is easily and quickly installed, does not interfere with the air flow and, therefore, it does not affect pre-cooling time, while delivering a constant and efficient protection during post-harvest. It is available as a sheet, to be used in the upper or part of the box.
SMARTPAC ADVANTAGES

SIMPLIFIED INVENTORY
SMARTPAC bag is an all-in-one solution

IMPROVED PACKING EFFICIENCY
By using less materials, packing time is reduced by up to 20%

IMPROVED ARRIVAL CONDITION
Releases gas in a constant manner, preventing decay and damages due to excess

IMPROVED PRESENTATION
Less wrapping material resulting cleaner presentation

QUICK RE-PACKAGING
Easy opening, sorting and repacking, if necessary

DOES NOT GENERATE DUMP WASTE
It is made of 100% recyclable low density poliethilene

IMPROVES PRE-COOLING PROCESS

PROTECTS AGAINST EXCESSIVE DEHYDRATION

EFFICIENT CONTROL OF DACAY DUE TO THE PRESENCE OF SO₂ (FUNGISTATIC EFFECT)