

smartPac

ACTIVE PACKAGING

by



QUIMAS

POST_HARVEST.TECHNOLOGY

Main arrival condition defects in table grapes.

Dehydration

Bleaching

Fungus



Mechanisms for the control of postharvest defects.

Dehydration:

Reduce cooling time and higher relative humidity in the packaging during storage and transit to destination.

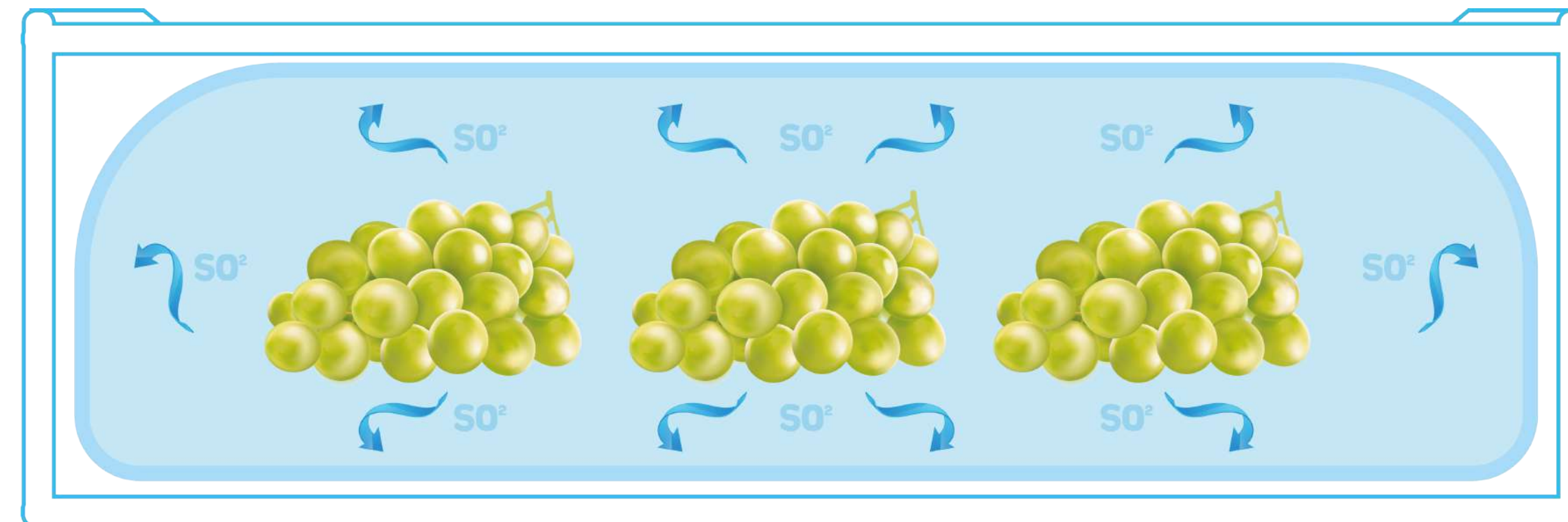
Fungus:

Applications and tasks in pre-harvest; homogeneous and constant exposure to fungicidal and/or fungistatic agents during postharvest.

¿What is SmartPac?

It is an **ALL IN ONE** packaging system that protects and extends the shelf life of the fruit, simplifies and speeds up the packaging process, promotes rapid cooling of fruit, and provides a relatively high quality environment for the best preservation of table grapes.

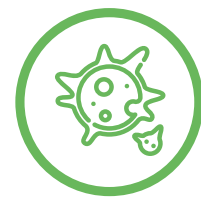
HOMOGENEOUS DISTRIBUTION OF SO₂



SmartPac is the most efficient, effective and friendly way to pack your fruit.



Physical barrier for humidity control.



Chemical control of fungal development.



Homogeneous distribution of gas inside the packaging.



All in one product, the packing process is faster



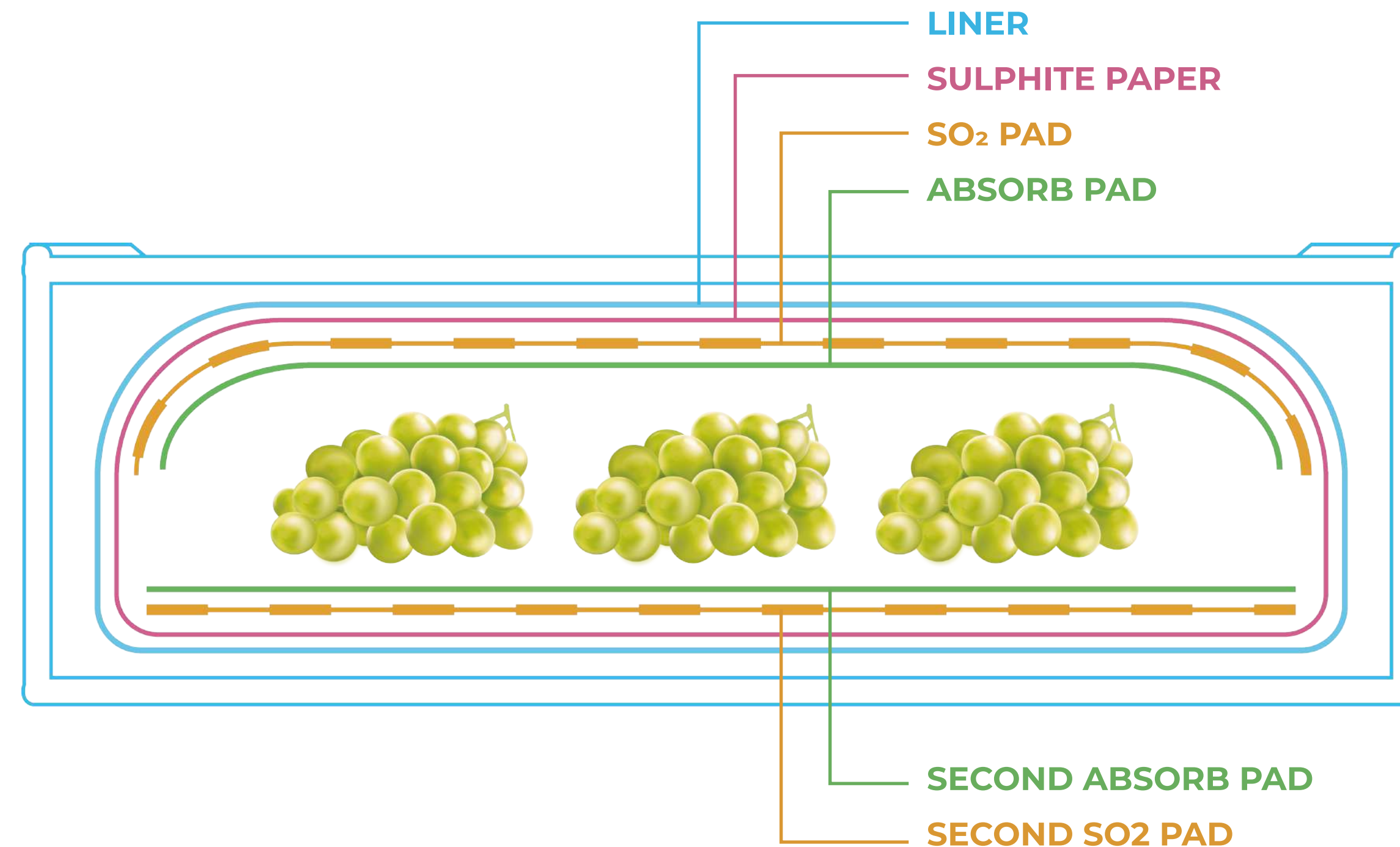
100% recyclable solution.

smartPac
ACTIVE PACKAGING



An alternative to traditional packaging

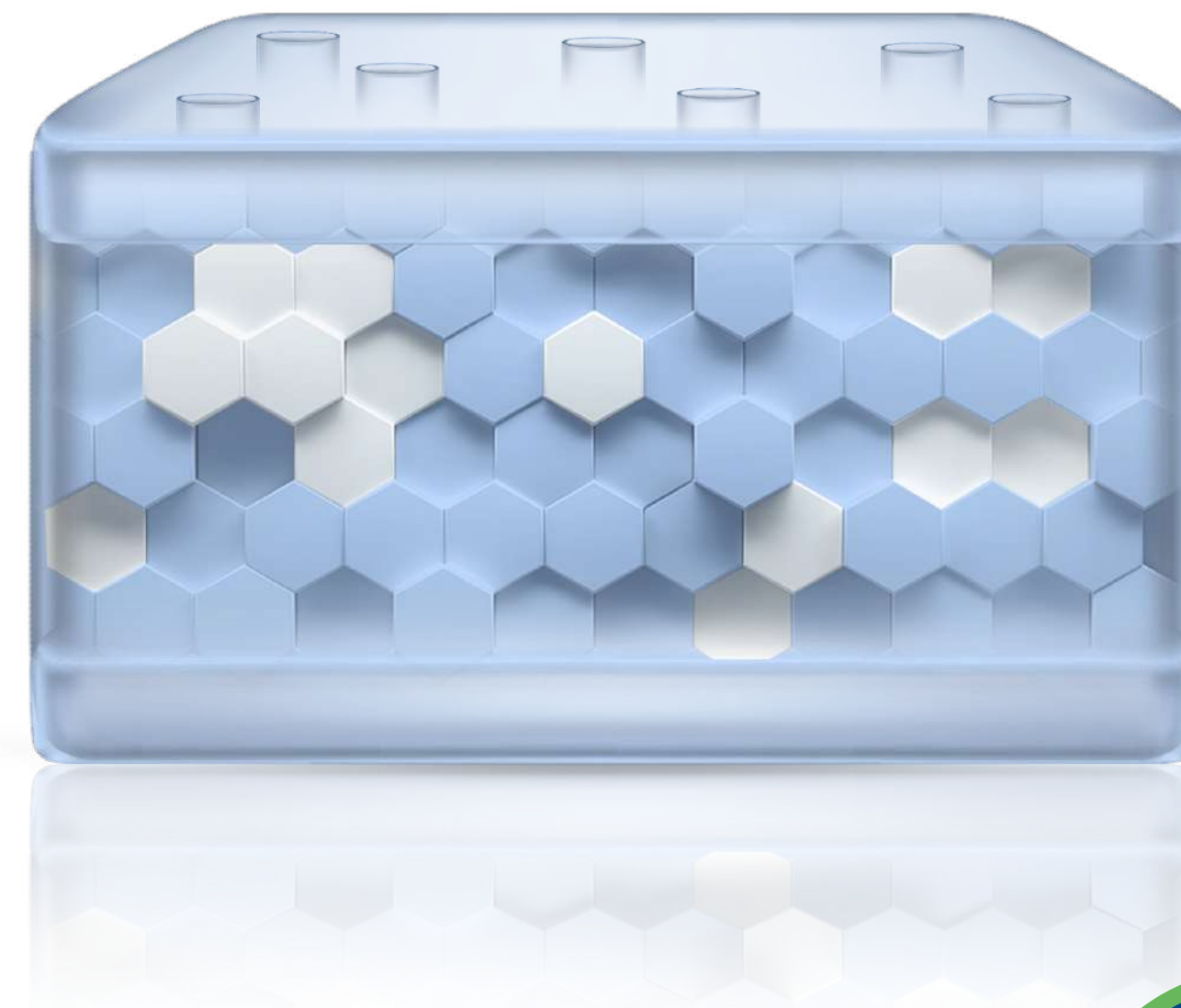
The traditional system can use various devices and layers to protect the fruit, delaying the process of packing, cooling and diffusion of Sulfur Dioxide, increasing labor costs, cold and storage. It also requires higher SO₂ emissions to pass through these layers and achieve fungal control.



HOW DOES SMARTPAC WORK?

The SmartPac bag or film is an active packaging that incorporates Sodium Metabisulfite, which in contact with the moisture of the fruit releases homogeneous and constant Sulfur Dioxide for the control of fungi, also maintains the condition of high humidity that the fruit requires to stay fresh.

**Multilayer
technology:**

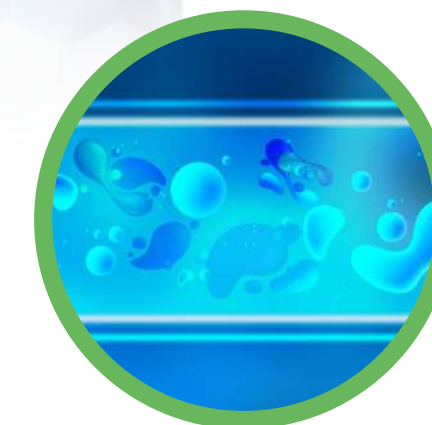


○ ——— **INNER LAYER**
Permeable layer PE

○ ——— PE + MBS (active ingredient)

○ ——— **EXTERNAL LAYER**
Impermeable layer PE

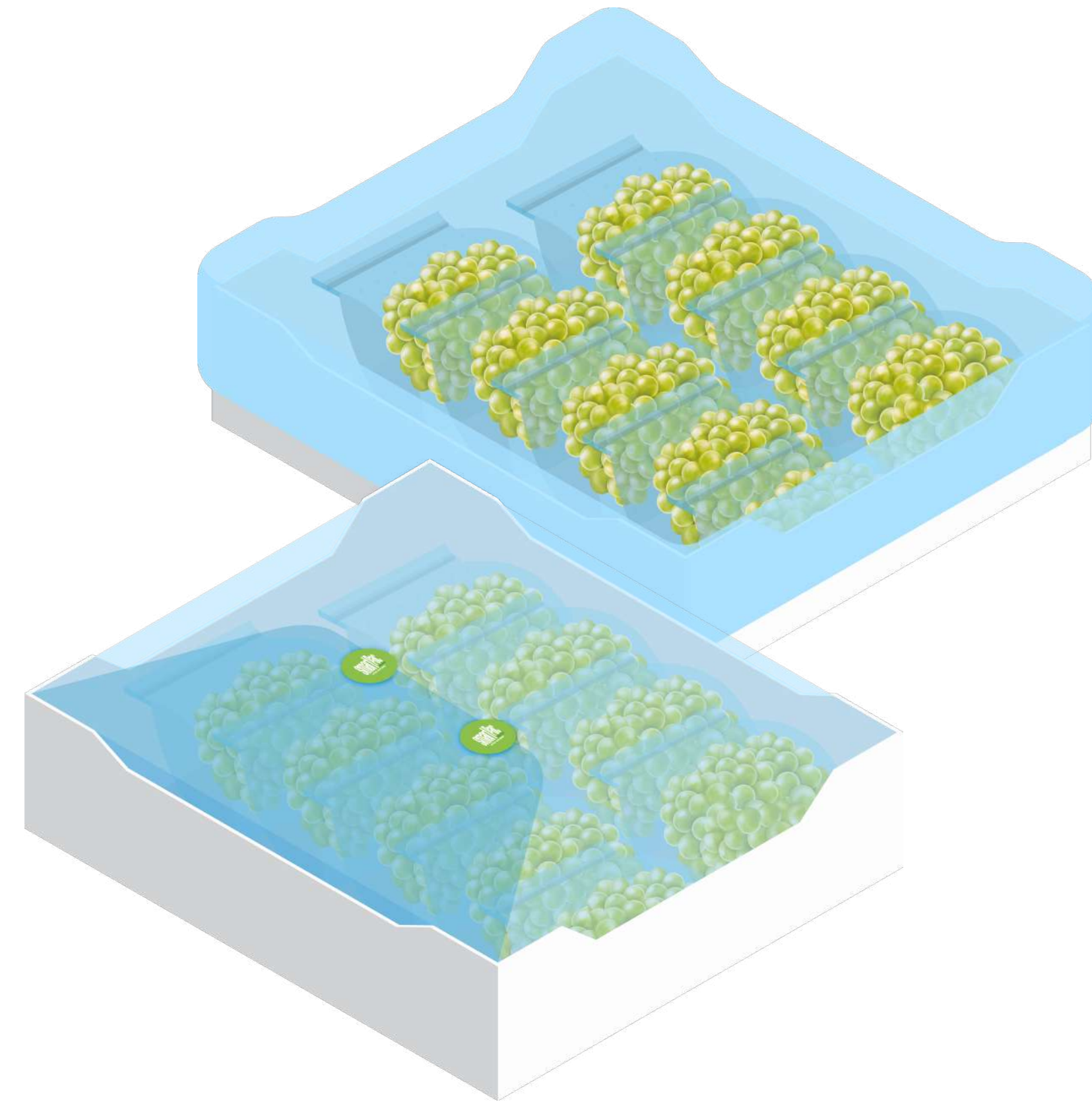
MICROSCOPIC CUTTING ——— ○



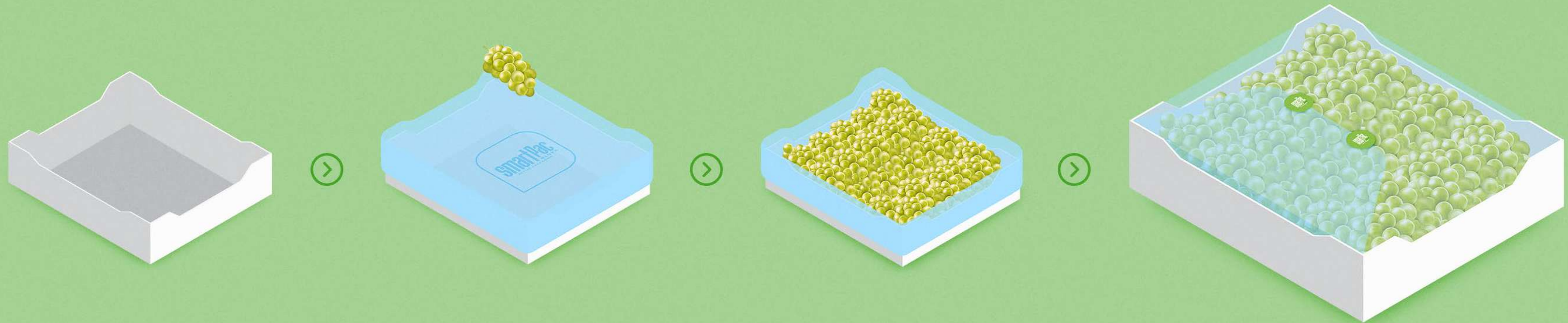
SmartPac Liner

The SmartPac bag is the most complete and efficient packaging solution. It significantly accelerates the speed of packaging, protects the fruit from dehydration and rotting, improves the presentation of the fruit and does not generate landfill waste.

Its multilayer technology allows a homogeneous and controlled emission of sulfur dioxide, achieving lasting protection and avoiding emission peaks that can damage the fruit.



SmartPac Liner

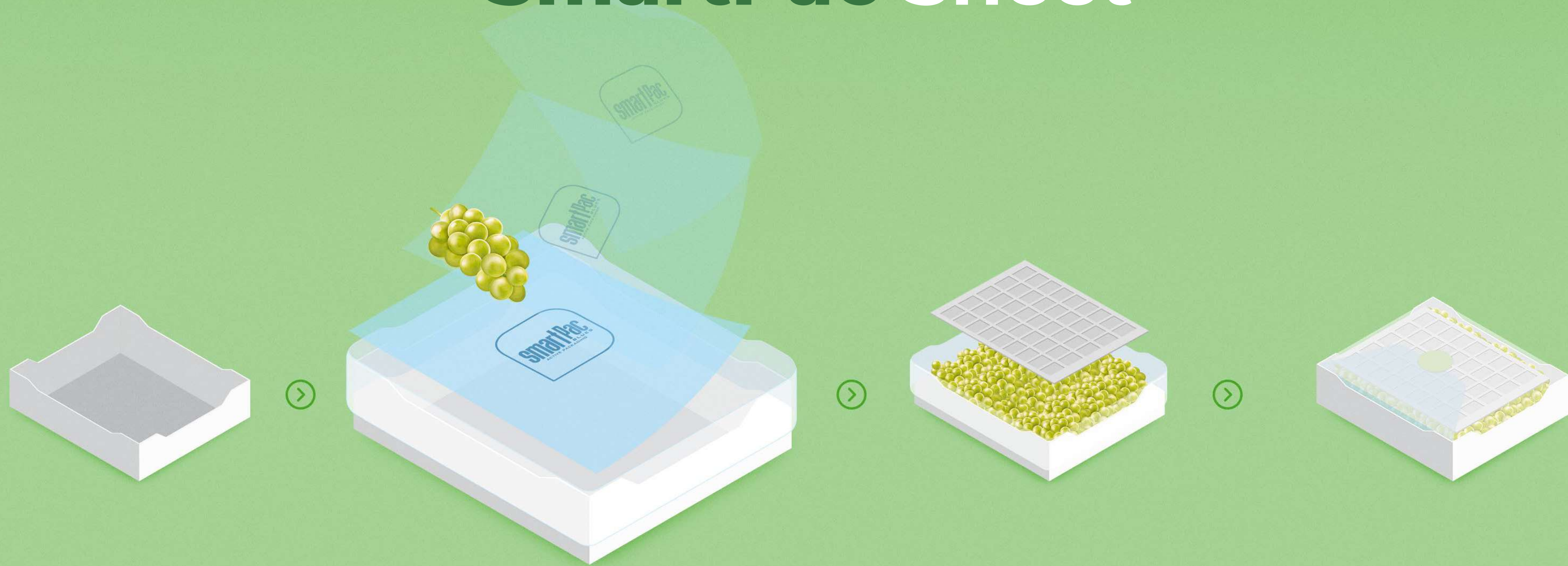


SmartPac Sheet

Slow release bottom pad used as a complement on the conventional packaging system to increase the gray mold control. This device does not require the use of absorpads.



SmartPac Sheet



SmartPac Benefits



**Reduces
inventory**



**Packing
speed**



**Better condition upon
arrival at destination**



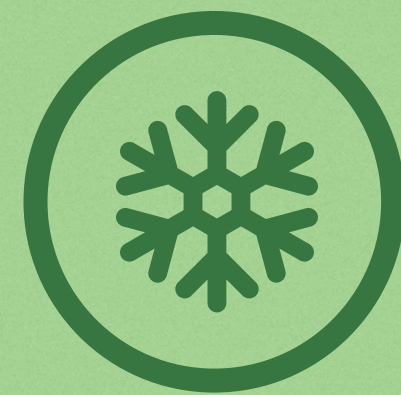
**Improve
presentation**



**Quick
repackaging**



**100%
Recyclable**



**Faster cooling
time**



**Protection
against
the excessive
dehydration**



**Efficient control of
rot due to the
presence of SO₂
(fungistatic effect)**

