

# PEAKfresh® USA

## Packing Guide for Grapes



Following harvest, grapes do not continue to ripen, so they should be picked at optimum maturity. Harvested grapes do not produce ethylene gas. Optimum harvest time is determined usually by "local tests" relating to sugar content, soluble solids, and color. Weather conditions, in particular rain and heat also play an important role in determining the optimum harvest time. Grapes are very susceptible to damage from gray mold, known as botrytis and also from blue mold known as penicillium. Sulfur dioxide Grape Guard Pads are used in the packaging process to control the development of botrytis. Control of penicillium is enhanced by good post harvest handling in reducing incidence of mechanical damage to berries but also quick pre-cooling to around 0°C (32°F) following

harvest. Sulfur dioxide also aids in the control of penicillium. Careful handling of grapes at harvest and careful attention to quickly cooling grapes to around 0°C (32°F) and the careful use of sulfur dioxide will overcome problems associated with berry split and berry drop and the production of mold damage.

Recommended Post Harvest Temperatures: 0°C (32°F) and 90-95% relative humidity.

**Packaging Method:** The first important step is to quickly pre-cool grapes following harvest. The permeability of PEAKfresh carton liners has proved to be very successful in providing adequate volumes of oxygen in order to set up the correct atmosphere to generate moisture and to activate Grape Guard Pads (sulfur dioxide) for long term storage. Grape Guard Pads are designed to release an initial burst of sulfur dioxide and a slow release of additional sulfur dioxide over a period of 8 to 12 weeks storage. The pads generate sulfur dioxide as a result of moisture take up and if moisture is excessive as a result of packing warm grapes or a break in refrigeration, then the amount of sulfur dioxide generated will be excessive and will taint the grape berries. By using PEAKfresh carton liners and correct refrigeration, Grape Guard Pads will operate efficiently over extended storage periods. The correct procedure for using Grape Guard Pads and PEAKfresh liners is to place a moisture absorbent sheet at the bottom of the PEAKfresh carton liner, place grapes on top of the moisture absorbent sheet, place a further moisture absorbent sheet across the top of the grapes and then be folded closed prior to sealing the box. Careful handling of the packaged grapes is essential to avoid berry damage. Length of storage varies between the varieties of grapes; however most varieties can be stored up to 36 weeks with adequate refrigeration.

Storage Temperatures: 0°C (32°F) and 90-95% humidity.

### *Important Please Read:*

*All recommendations for the use of PEAKfresh products are given in good faith and based on proven field experience. Packaging method, storage temperatures, storage humidity levels, transit and destination conditions are factors likely to affect the performance of PEAKfresh products and no liability for indirect or consequential damage can be accepted. We recommend that PEAKfresh products be tested under local conditions before introduction to large scale commercial applications.*