



# Pink Lady<sup>®</sup>



## Quality Manual

For markets served by Pink Lady America, United States Domestic Market and exports to Mexico and Canada.





## Harvest Maturity Indices

# Immature

**Brix: 10-11%**  
**Firmness (Pressure): 20lbs**



**Surface  
Color**

Green



**Background  
Color**

Green  
Score = 1  
(Scale 1-5)



**Starch  
Content**

Full black to some  
clearing in core  
Score = 1-2  
(Scale 1-6)



### Coldstorage Disorders

Extreme Scald Risk





## Harvest Maturity Indices

# Near Maturity

**Brix: 12-13%**

**Firmness (Pressure): 18-20lbs**



**Surface  
Color**

Dull pink to light red



**Background  
Color**

More green than yellow

Score = 1  
(Scale 1-5)



**Starch  
Content**

Full black to some  
clearing in core

Score = 1-2  
(Scale 1-6)





## Harvest Maturity Indices

# Optimum Maturity

**Brix: Above 13%**  
**Firmness (Pressure): 17-18lbs**



**Surface  
Color**

Pink / Red



**Background  
Color**

Green with yellow-blond tinges  
Score = 2.5 - 3.5  
(Scale 1-5)



**Starch  
Content**

Clearing extends  
just beyond core  
Score = 2.5 - 3.5  
(Scale 1-6)





## Harvest Maturity Indices

# Ready to Eat

**Brix: Above 13%**  
**Firmness (Pressure): 15 - 17lbs**



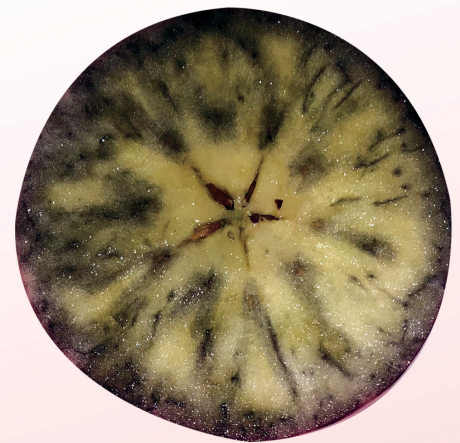
### Surface Color

Bright Pink / Red



### Background Color

Green / Yellow  
Score = 4-5  
(Scale 1-5)



### Starch Content

Clearing extends  
throughout cortex  
Score = 4-5  
(Scale 1-6)





## Harvest Maturity Indices

# Overmature

**Brix: Above 13%**

**Firmness (Pressure): Below 14lbs**



### Surface Color

Red with greasy surface



### Background Color

All Yellow  
Score = 5  
(Scale 1-5)



### Starch Content

90-100%  
cortex clear  
Score = 5-6  
(Scale 1-6)





## Post-Harvest Recommendations

# Storage Advice

### **Regular Storage:**

Fruit that is not overmature at the time of harvest can successfully be held in regular storage conditions for up to 4 months.

Pre-cool fruit to 30-35 degrees Fahrenheit within 24 hours of harvest

Maintain at 33 degrees Fahrenheit plus or minus 1 degree

Pink Lady® is sensitive to low temperatures post-harvest.

### **Controlled Atmosphere:**

Pink Lady® holds well in controlled atmosphere. With good harvest management, optimally mature fruit can be stored long term, approximately 8 months, in controlled atmosphere. The apple is vulnerable to excess carbon dioxide. Do not store at very low temperatures and ensure that CO<sub>2</sub> is maintained below 1.5%.

1.5-2.5% Oxygen

1.0-1.5% Carbon Dioxide maximum

Treatment with MCP-1 is beneficial in guarding against superficial scald and controlling maturity.





## Quality Standards

# Minimum quality specifications at origin

## CHARACTERISTICS

ATTRIBUTE	DESCRIPTION
Color Washington Extra Fancy US Extra Fancy	No less than 40% of the apple's surface must be covered by a bright pink color in a continuous block over a pale green to cream but not yellow background.  A 5% tolerance is allowed for apples with an interruption of color no larger than 1.5 square inch
Color Washington Fancy US Fancy	No less than 25% of the apple's surface must be covered by a bright pink color in a continuous block over a pale green to cream but not yellow background.
International color specification for apples shipped to: <ul style="list-style-type: none"><li>• Asia</li><li>• Gulf State territories</li></ul>	No less than 60% of the apple's surface must be covered by a bright pink color in a continuous block over a cream to pale green but not yellow background.
Shape	Slightly elongated, but symmetrical
Firmness (Pressure)	14.3 lbs. or greater, measured with an 11 mm penetrometer
Texture Description	Firm, crisp and crunchy
Brix	Average 13% or greater
Malic Acid	Optimum range is 0.4 to 0.8
Flavor Notes	Tart with a sweet finish
When proper licensing is in place, these cultivars are approved to carry the Pink Lady® brand trademark	<b>Cripps Pink</b> <b>Improved Cripps Pink</b> (known as <b>Rosy Glow</b> outside of the U.S.) <b>Lady in Red.</b>  <b>Barnsby/PLBAR B1</b> <b>Maslin/PLMAS98</b> <b>Pinkebell/PLFOG99</b> } allowed in territories managed by Pink Lady America only
Commercial Wax	The export markets of Europe and the Gulf States do not allow commercially waxed fruit



# Quality Standards

## Minimum quality specifications at origin

### DEFECT DESCRIPTIONS & CLASSIFICATIONS (P1)

CRITICAL DEFECTS	DESCRIPTION
Core Rot	The apples must be free from core rot
Decay	The apples must be free from decay. Including Gloeosporium, bull's eye rot and other fungal developments
Internal Browning	The apples must be free from internal browning
Scald	The apples must be free from superficial scald and soft scald

***THE TOLERANCE FOR CRITICAL DEFECTS IS 1% OF THE SAMPLE***

MAJOR DEFECTS	DESCRIPTION
Black Spot/Apple Scab	When more than 3 spots of 1/16th diameter are present on a single piece of fruit.
Bitter Pit	Any presence of bitter pit on the surface of the apple is a major defect.
Bruising – Major	A bruise that is more than incidental, affecting an area greater than 3/16 <sup>th</sup> inch deep by 7/8 <sup>th</sup> -inch diameter. The underlying flesh is discolored and soft.
Stem Bowl or Calyx Splits and Cracks	Any unhealed split or crack is a major defect. Healed splits or cracks can be no longer than 1/4 <sup>th</sup> inch and must be contained within the stem bowl or calyx basin.
Greasiness	When fruit is sticky or when fingerprints can be left on the skin.
Hail Marks – Major	When the skin is broken, no tolerance is allowed. Healed marks must not exceed 1/8 <sup>th</sup> inch diameter and 1/16 <sup>th</sup> -inch deep.
Insect Damage - Major	No tolerance for unhealed damage or when flesh discoloration is present.
Stem Punctures, Skin Breaks & Mechanical Injuries	There should be no open or unhealed wounds. Presence of 2 healed marks or skin breaks exceeding 1/8 <sup>th</sup> inch on a single fruit.
Sunburn – Major	When an area of the surface greater than 1/2-inch is affected and the flesh is discolored.

***MAJOR DEFECTS, INCLUDING CRITICAL DEFECTS, MAY NOT EXCEED 3% OF SAMPLE***





## Quality Standards

### Minimum quality specifications at origin

#### DEFECT DESCRIPTIONS & CLASSIFICATIONS (P2)

MINOR DEFECTS	DESCRIPTION
Blemishes: scars, scratches, limb rub and frost injury	Dark brown or black marks must not affect an area greater than 1/4-inch
Bruising - Minor	Bruises which are not slight may be no more than 1/8-inch in depth and diameter is less than 5/8-inch. A combination of bruises must not detract from the apple's appearance and edibility.
Chemical Burn	Any burns that affect the surface color.
Stem Bowl or Calyx Splits and Cracks - Minor	Light, healed cracks 1/4 inch or smaller. Must be contained within the stem bowl or calyx end.
Dirty Fruit	Fruit must be clean, but dust is allowed in lower halves of stem and calyx basins.
Hail Marks- Minor	More than 2 light marks less than 1/8 <sup>th</sup> inch diameter and no more than 1/16 <sup>th</sup> inch deep. They may not break the skin surface.
Hammering and Ridging	When the surface is discolored
Insect Damage – Minor	A healed, superficial skin mark, greater than 1/8 <sup>th</sup> inch
Lenticel Damage	2 or more marks present, greater than 1/16 <sup>th</sup> diameter
Malformed /Off Shape	When a deviation from the typical shape more than 3/4 <sup>th</sup> inch is present
Net-like Russet	Marks that are rough to the touch and contrast with the skin color. Must affect less than 5% of the surface
Russet – Smooth Solid Russet – Rough	If not contained in the stem bowl, no more than 5% of the apple's surface may be affected. None
Sunburn – Minor	Surface color is affected in an area less than 1/2 inch and does not blend into normal color
Other	Includes defects that mark fruit such as Flyspeck and Sooty Blotch. Must be smaller than 1/16 <sup>th</sup> diameter

***TOTAL DEFECTS, CRITICAL + MAJOR + MINOR MAY NOT EXCEED 8% OF THE SAMPLE***