



3810 ROSE STREET SCHILLER PARK, IL 60176

BLACKBERRY SPECIFICATIONS

The following standards meet the retailers and consumers' expectations.

Place these controls throughout your process to meet the standards and avoid rejections.

BERRY SIZE LARGE and MEDIUM berries in any presentation. A max of 3 SMALL berries per clamshell on any presentation.

Large 25mm plus

Medium 21 to 24mm

Small Under 21mm



FIRMNESS Firm fruit ≥ 25 neutons

Testing can be done using a Lantek FHT-05 Fruit Hardness tester

COLOR Entire surface well-colored, black

BRIX 10 plus

FREE FROM Calyxes, cores, insects, dirt, foreign materials, mold, blemishes, leaking, dehydration, regression, and deformities.

NET WEIGHT Net weight: weight of fruit alone, excluding weight of clam, diaper, any other components. Net weight **must exceed weight** printed on the label of the clamshell to account for dehydration during distribution process at the time of retail sale:

LABEL	Range at the time of arrival to Sun	Range at the time of arrival to Sun	LABEL	SB suggests to pack at field *
	Belle:	Belle:		
6 OZ	6.3 OZ - 6.5 OZ	178g - 184g	170g	6.5 OZ / 184g
12 OZ	12.5 OZ - 12.7 OZ	354g - 360g	340g	12.7 OZ / 360g
18 OZ	18.7 OZ - 18.9 OZ	530g - 536g	510g	18.9 OZ / 536g

Anything below these ranges will be considered UNDERWEIGHT

There is zero tolerance for UNDERWEIGHT.

It is suggested **WEIGHING EVERY** clamshell at the inspection point in the field to ensure proper weight. Have enough personnel to ensure that inspection station doesn't become a bottleneck.

SUGGESTED SCALE FOR FIELD USE

An industrial, battery operated scale that will not easily lose calibration with ability to weigh 2000g x 1 gram. Scales should be calibrated daily to insure they are in working order.

Should you have any questions about the equipment or need assistance in selecting and purchasing scales on your behalf, please contact Ken Hopps.



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PACKAGING, LABELING, PALLETIZATION SPECIFICATIONS

PACKAGING MATERIALS

Check that every case being packed in the field has the correct box, clamshell and label.

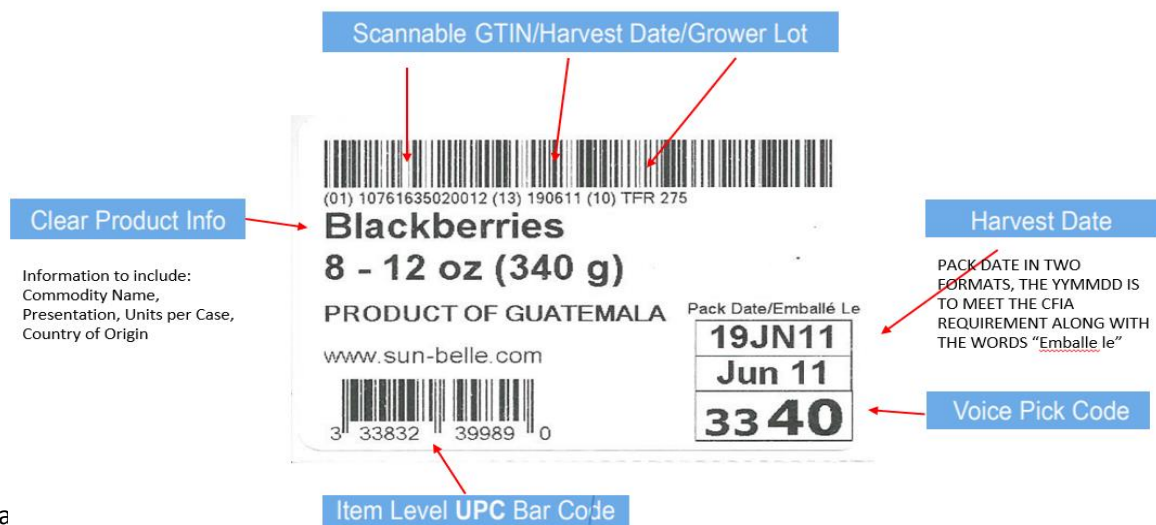
Packaging materials should be stored in an enclosed space to prevent contamination and/or damage resulting from heat, dust, rain, condensation, insects or any other exposure to the elements.

CASE LEVEL LABEL: To meet Produce Traceability Initiative (PTI) & Canadian Food Inspection Agency (CFIA) Requirements.

A PTI label that meets both the PTI and the CFIA requirements must be applied to each case.

Sun Belle can provide the software to print this labels (3" x 2" thermal transfer)
that comply with the PTI/CFIA requirements.

PTI / CFIA CASE-LEVEL INFORMATION REQUIREMENT



If Grower ha

**LARGE RETAILERS HAVE MADE IT A REQUIREMENT THAT ALL BOXES ARE LABELED AND MEETING THE PTI REQUIREMENTS
NON-COMPLIANCE COULD LEAD TO PENALTIES FROM RETAILERS.**

**FOR CANADIAN EXPORTS, A MISSING OR NON-COMPLIANT LABEL CAN RESULT IN REJECTION OF SHIPMENT AT
THE CANADIAN BORDER.**

PALLET CONFIGURATION

Pack size	Amount per pallet	Amount per layer	Tie sheet	Layers per pallet
12x6 oz.	240	12	every 5th layer	20
8x12 oz.	160	10	every 4th layer	16
8x18 oz.	75	5	every 3rd layer	15

Pallet must have tie sheet secured to top of pallet.

Cases must be secured to pallet with 4 corner boards and straps (A minimum of 4 straps are recommended).

PALLETS: You will receive CHEP pallets for outbound shipments as most chains are on the CHEP pallet exchange program.



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POST-HARVEST RECOMMENDED PROCEDURES

Following these suggestions will lengthen shelf-life.

COLD CHAIN

- 1) Ensure that the harvested & packed fruit is moved into a refrigerated area as quickly as possible (35 degrees).
- 2) Given the high temperatures in the field, lower the temperature of the packed berries gradually to avoid thermal shock. Do not precool fruit immediately after harvesting. Let product rest in a 35 degree cooler; once the temperature of the fruit pulps 45-50 Fahrenheit, then proceed to precooling (forced air precooling).
- 3) Precooling: If a precooler is available, forced air cooling can help accelerate lowering temperature and removing moisture from field. Monitor that pulped temperatures reach 35 and remove from precooler. Maintaining precooling running past the 35 degree mark can cause damage to the fruit.
- 4) Breaking the cold chain can potentially lead to condensation. Temperature changes can also weaken the fruit, resulting in mold, regression, softness and leaking. Therefore, once fruit is moved into refrigeration, **maintain or lower temperature** at every subsequent step/movement:
 - 4a) receiving product from field
 - 4b) a refrigerated receiving area of facility
 - 4c) movement of product between areas in the refrigerated warehouse
 - 4d) refrigerated dock prior to shipping.
- 5) Loading dock for outbound shipment must also be refrigerated, able to maintain temperatures ranging between 35 and 45 Fahrenheit. Avoid having 35 degree cooled product spend too much time in dock, particularly if dock temperature is higher than 38 degrees.
- 6) Monitor that your coolers' temperatures can be maintained as close to 35 degrees; variances of extreme highs and lows will negatively impact the fruit.

Holding times at each step depend on your equipment



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TRAILER LOADING PROCEDURES

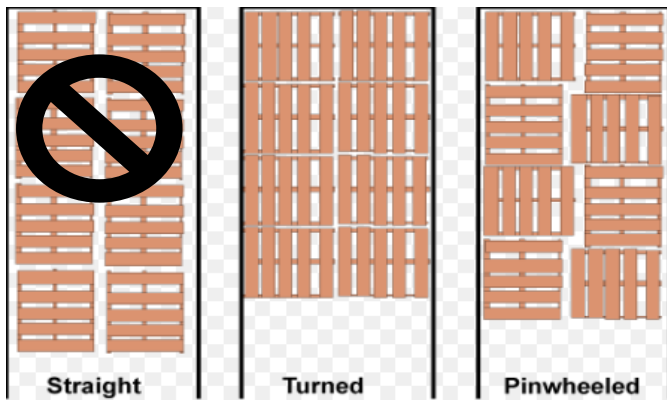
Sun Belle makes it a requirement for all carriers to supply trailers that are clean and in good repair.

As the shipper, you play an important role confirming that trailers meet the following requirements:

- 1) Inspect for cleanliness and good repair. Free of moisture, odors, or other conditions which may contaminate or cause damage to the shipment.
- 2) Only load trailers that are cooled to 35. Check this by taking the reading of the trailer's thermostat.
- 3) Once cold, and prior to opening the trailer doors for docking, ask driver to **TURN OFF REFRIGERATION** unit to prevent the accumulated mass of cold air from being blown out of the trailer.
- 4) After the refrigeration system is turned off (temporarily), driver can a) open doors, b) dock on the loading bay, and dock door can be opened for loading. Verify once again the cleanliness and good repair of the trailer, this last point includes checking that the air shoot is in good repair, a faulty air shoot can result in damaged cases (some too cold, some warm).

IF ANY CONDITIONS ARE NOT MET, PLEASE CONTACT SUN BELLE TRANSPORTATION IMMEDIATELY

- 5) Load pallets; making sure that there are no large gaps between contiguous pallets; pallets with no gaps between them support one another, reducing the chance of fallen or collapsed pallets.
- 6) Forklift driver must know how many pallets are on load, so the appropriate loading method PINWHEELED or TURNED ONLY. Straight can lead to pallets tilting if not done correctly.



- 7) Activate and place temperature recorder on 2nd to last row of pallets, between pallets.
- 8) We suggest that driver is allowed to check pulps and sign off on paperwork.
- 9) Secure load (load bars), close door, and observe that driver **TURNS ON REFRIGERATION w set point 35 Fahrenheit on CONTINUOUS RUN mode.**



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MOST COMMON QUALITY PROBLEMS - IF FOUND, CAN RESULT IN LOW ARRIVAL SCORE, LOSSES, CUSTOMER & CONSUMER DISATISFACTION OR REJECTION.

UNDERWEIGHT

Low weights are subject to penalties, and fines by state and local agencies. Each low weight constitutes a separate violation. **CUSTOMERS CAN REJECT AN ENTIRE LOAD IF THEY FIND A SINGLE UNDERWEIGHT CLAMSHELL.**

Different problems have different degrees of severity.

Samples shall be taken throughout the shipments and scoring shall be given to defects by degree of "Damage" Serious Damage and "Very Serious Damage" under categories of.

DAMAGE:

No more than 5% of any one defect or 10% cumulative total defects

Deformed
White Cell

Immature
Calyxes & Cores



Deformed



White Cell



Immature



Calyxes & Cores



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SERIOUS DAMAGE:

No more than 5% of any one defect or 10% cumulative total defects

Dehydration
Regression



Dehydration

Mold
Decay



Regression

No more than 1%



Leaking / Decay



Mold

VERY SERIOUS DAMAGE: Zero tolerance

FOREIGN MATERIALS

INSECTS



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USDA - U.S. No. 1 CRITERIA:

U.S. No. 1 Consists of blackberries of one variety which are firm, well colored, well developed and not overripe, which are free from calyxes, mold and decay, and from damage caused by dirt or other foreign matter, shrivel, moisture, disease, insects, mechanical or other means.

USDA Tolerance for defects - In order to allow for variations incident to proper grading and handling, not more than 10 percent, by volume, of berries in any lot may fail to meet the requirements of this grade, including therein not more than 5 percent for defects causing serious damage, and including in this latter amount **not more than 1 percent of berries which are affected by mold or decay.**

Damage - Defined as any defect or any combination of defects, which materially detracts from the appearance, or the edible or marketing quality of the berry. Deformed, immature, calyxes, white cell.

Serious damage (no more than 5%) - Defined as any defect or any combination of defects which seriously detracts from the appearance or edible or marketing quality of the berry. Berries which are Overripe, Leaking, Dehydrated, Moldy, Decayed or which has less than one-half of the surface covered with regression

Very Serious damage (no more than 1%) - Defined as defects with insects and or foreign materials and defects which seriously detracts from the appearance or edible or marketing quality of the berry.

Quality Inspection Sampling at Sun Belle facilities

Sun Belle Sampling size shall be as follows:

LTL – not less than 6 clamshells when receiving load is 1 to 2 pallets

Partial Loads – More than 2 pallets, less than 24 – 2 clamshells per pallet

Full Load – More than 24 pallets – 2 clamshells per pallet