





Shelf Life Extension Solutions

Reduce Dump rate by 30%

Test Protocol



- Approx. 500 grams Cherries
- Kept at 37 F for 28 days
- 4 Different combinations
 - KIF Non Vented Bag
 - KIF Vented Bag
 - Control
 - Normal Clamshell



Observations



- Checked weekly for
 - Overall Appearance
 - Stem Colour
 - Firmness
 - Weight Loss



Day 1



KIF Non Vented



Keep It Fresh



KIF Vented



Clamshell

Control

Observation Day 10





KIF Non Vented – Wt Loss 0g, App 5, Stem 5, Firm 5



Control Wt Loss – 28 g, App 4, Stem 5, Firm 5



KIF Vented Wt Loss – 10 g, App 4, Stem 5, Firm 5



Clamshell Wt Loss – 18 g, App 4, Stem 5, Firm 5

Observation Day 21





KIF Non Vented – Wt Loss -2 g, App 4, Stem 4, Firm 4



Control Wt Loss – 58 g, App 3, Stem 3, Firm 4



KIF Vented Wt Loss - 24 g, App 3, Stem 4, Firm 4



Clamshell Weight Loss – 40 g

Observation 28 days

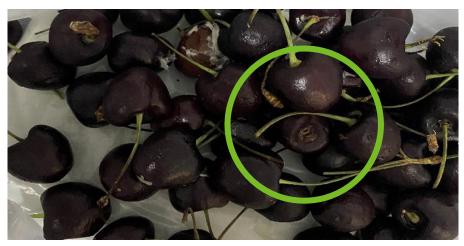
Keep It Fresh



KIF Non Vented Wt Loss -2 g, App 4, Stem 4, Firm 4



Control Weight Loss – 78 g, App 3, Stem 3, Firm 3



KIF Vented Wt Loss – 30 g, App 3, Stem 4, Firm 4



Clamshell Weight Loss – 54 g, App 3, Stem 3, Firm 4





Cherries Stored in a Refrigerator - Cold Storage - 37 Degrees												
	Tested After 10 Days (July 12)				Tested After 21 Days (July 23)				Tested After 28 Days (July 30)			
Description	QC - Overall Appearance (1-5)	Stem Color (1-5)	Firmness (1-5)	Total Weight Loss (g)	QC - Overall Appearance (1-5)	Stem Color (1-5)	Firmness (1-5)	Total Weight Loss (g)	QC - Overall Appearance (1-5)	Stem Color	Firmness (1-5)	Total Weight Loss (g)
#1 - KIF (Non- Vented)	5	5	5	0	4	4	4	-2	4	4	4	-2
#2 - KIF (Vented)	4	5	5	-10	3	4	4	-24	3	4	4	-30
#3 - Control	4	5	5	-28	3	3	4	-58	3	3	3	-78
#4 - Clamshell	4	5	5	-18	3	4	4	-40	3	3	4	-54

Weight Loss



	Refrigerator - Cold Storage - 37 Degrees										
#1 KIF (Non-Vented)	Weight (grams)	#2 KIF (Vented)	Weight (grams)	#3 Control	Weight (grams)	#4 Clamshell	Weight (grams)				
2-Jul	462	2-Jul	476	2-Jul	460	2-Jul	470				
12-Jul	462	12-Jul	466	12-Jul	432	12-Jul	452				
16-Jul	460	16-Jul	460	16-Jul	422	16-Jul	448				
23-Jul	460	23-Jul	452	23-Jul	402	23-Jul	430				
30-Jul	460	30-Jul	446	30-Jul	382	30-Jul	416				
Total Weight Loss:	-2	Total Weight Loss:	-30	Total Weight Loss:	-78	Total Weight Loss:	-54				
Weight Loss %	-0.43%		-6.30%		-16.96%		-11.49%				

Results & Recommendation

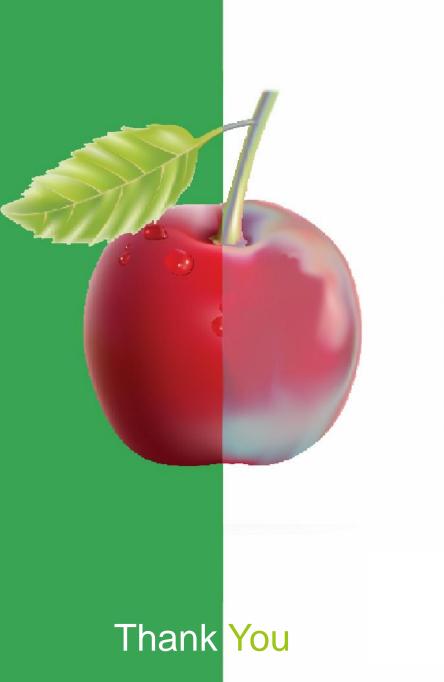
- KIF Non-Vented Liners better than other trialled options
- Weight loss is negligible at 0.43% compared to 17% in normal liners and 12% in clamshells

Fresh

- Stem Colour Remains green in KIF bags due to controlled ripening compared to other trialled products
- Fruit remains firm and fresh due to ethylene absorption of the Ethylene Absorbing masterbatch in the KIF Bag.
- There is no mold development in KIF liners due to the moisture regulation properties
- Overall Appearance remains best in KIF Non-Vented Liners for refrigerated storage and transportation of cherries.







Shelf Life Extension Solutions

> **Reducing Wastage** Improving Profits