

Deep Chill



WHY DEEP CHILL?

The high demand for many middle meats that occurs around the holiday season often outweighs available supply. If a retailer can provide a continuous supply of these items at an affordable price throughout the holiday season, they can capitalize on potential customers that are currently being lost.

Enter Deep Chill, a tested and proven solution that many of our customers are using to mitigate these factors and provide a quality product.



What Is Deep Chill?

Information below is based on research studies to help create an opportunity around supply solutions and cost advantages to fulfill customers' needs. This program is suited for boneless and bone-in beef subprimals, but controlled conditions must be maintained.

Definition of Deep Chilling

- Decreasing product internal temperature from 34°F – 38°F to 0°F – 10°F and holding for a specified time period.

Scientifically Tested and Evaluated Cargill Products

- Bone-in and boneless strip loins
- Bone-in and boneless ribs
- Butt tenderloins
- Whole tenderloins
- Tri-tips

Labeling

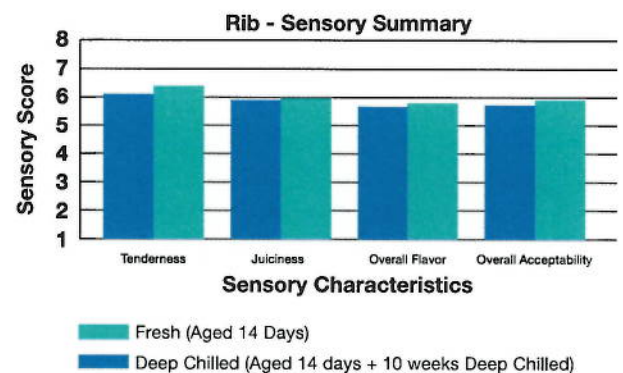
- Doesn't have to be labeled as "previously frozen" if held above 0°

Best-practice Recommendations for Chilling/Tempering of Product

- Cold storage facilities' deep chilling holding temperature ranges need to be set between 5°F and 10°F.
- Recommend that subprimals begin deep chilling 20 days postmortem or sooner.
- Optimum time for product held in deep chill is 150 days.
- Allow time for tempering of product (14-20 days), as it is expected that product may be at the same temperature for a few days as it is within the 28°F – 35°F range.
- Furthermore, it is recommended that tempered product is at 35°F prior to further fabrication for the max amount of purge in bag. This minimizes the amount of purge that will occur in the retail package on the shelf.

SENSORY SUMMARY

Overall, no significant differences ($p > 0.05$) were observed between fresh and deep chilled products for tenderness, juiciness, flavor or overall acceptability.



Scale used: 1 dislike extremely, 2 dislike very much, 3 dislike moderately, 4 dislike slightly, 5 neither like nor dislike, 6 like slightly, 7 like moderately, 8 like very much, 9 like extremely.