



COD FILLETS 28 DAYS SUPER-CHILLING PRESERVATION

TEST REPORT

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ABSTRACT

- In this study, the cod fillets were used to do a 28 days super-chilling preservation test in King Son IFP Aging Chamber. Cod sampling inspection were done on day 21 and 28 to check the total plate count(aerobic plate count). It was found that the total plate count on cod fillet by super-chilling preservation in King Son IFP Aging Chamber on day 28 are 3.2×10^5 CFU/g , which are lower than the limit of 3.2×10^6 CFU/g , prescribed by Taiwan Ministry Of Health And Welfare. This result shows the excellent super-chilling preservation performance and value performed by King Son IFP Aging Chamber.

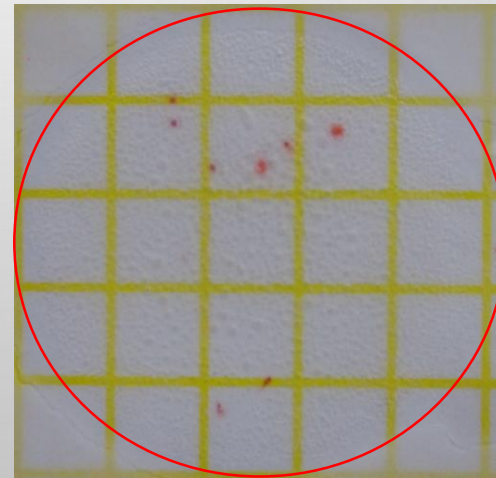
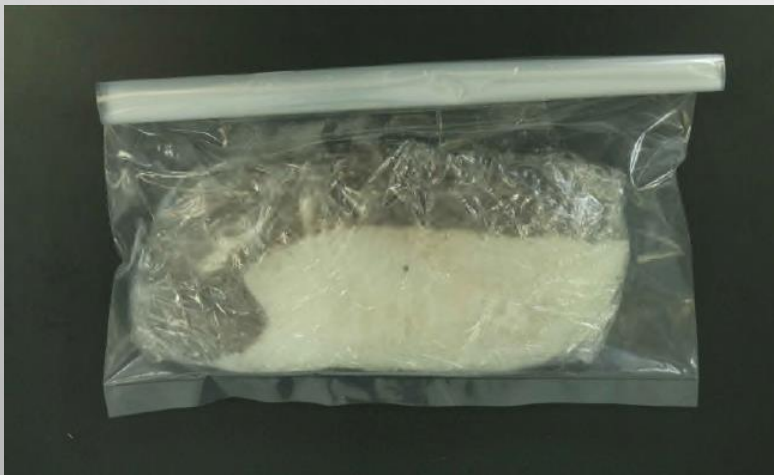
TEST MATERIAL AND EQUIPMENT

- The samples used in this test are vacuum-packaged frozen cod fillet, purchased from Carrefour supermarket, and the test equipment used in this super-chilling preservation experiment is King Son IFP Aging Chamber, manufactured by King Son Instrument Tech., Co. Ltd.



TEST PROCEDURES AND METHOD

- Setup super-chilling preservation temperature at -2.2°C in King Son IFP Aging Chamber. Purchased frozen cod fillets from Carrefour supermarket and placed them immediately in King Son IFP Aging Chamber for 28 days super-chilling preservation test.
- Removed one piece of cod fillets as the sample on day 21 and 28 respectively, packed it by plastic wrap and put it into cleaning sealed plastic bag and then immediately delivered to SGS Taiwan food lab for the total plate count (aerobic plate count) inspection.



RESULTS

The total plate count test for cod fillets 28 days Super-chilling preservation

Day 21	$9.6 \times 10^3 \text{CFU/g}$
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Day 28	$3.2 \times 10^5 \text{CFU/g}$
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Taiwan Food safety law limiton frozen fish & shell category

$$3.0 \times 10^6 \text{ CFU/g}$$


Learned from above SGS Taiwan food lab test results, the cod fillets were subjected to a 28-day super-chilling preservation test, after SGS tested, the total plate count (aerobic plate count) on cod fillet samples on day21 or day 28 were lower than Taiwan food safety law prescribed limits, in which the total plate count on day 21 is even much lower than raw food edible limits.

CONCLUSIONS AND DISCUSSIONS

• Super-chilling preservation is a novel next generation food preservation technology. The advantages performed by super-chilling technology and process are

- preserves food very well, without damage food tissue;
- energy saving , since super-chilling is partial freezing on the surface of food;
- shorter thawing time needed for food process
- bacterial growth inhibition

Besides the traditional refrigeration and freezing, super-chilling technology provides an alternative for food process and preservation.

- Learned from above experimental results , King Son IFP Aging Chamber can preserve cod fillets in super-chilling environment for 28 days that the total plate count (aerobic plate count) on cod fillets are below Taiwan food safety law limits. King Son IFP Aging Chamber is incorporated with food tech controller and designed in constant temperature and humidity multiple points monitor, and servo control technology commercializes and realizes super-chilling process and preservation mass production in price performance value.

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報告編號: FA/2017/12192
日期: 2017/01/20
頁數: 1 of 2



以下測試之樣品係由申請廠商所提供並確認資料如下:

產品名稱: 鱈魚
樣品分裝: 請參考報告末頁樣品照片
產品型號: —
產品批號: —
申請廠商: 慶豐科技股份有限公司
製造日期: 2016/10/12
有效日期: 2017/10/12
收樣日期: 2017/01/13
測試日期: 2017/01/14

測試結果:

測試項目	測試方法	測試結果	定量/偵測 極限(註3)	單位
★生菌數	衛生福利部部授食字第1021950329號公告修正食品微生物之檢驗方法-生菌數之檢驗。	9.6×10^3	10	CFU/g

備註: 1. 測試報告僅就委託者之委託事項提供測試結果, 不對產品合法性做判斷。

2. 本報告不得分離或摺錄使用。

3. 若該測試項目屬於定量分析則以「定量極限」表示; 若該測試項目屬於定性分析則以「偵測極限」表示。

4. 低於定量極限/偵測極限之測定值以「未檢出」或「陰性」表示。

5. 測試項目名稱旁有加★者, 為通過衛生福利部食品藥物管理署認證項目。

- END -



連結至SGS安心資訊平台
聯絡人: 任志正 博士

- The total plate count test for Cod fillets Super-chilling preservation on day 21

測試結果	定量/偵測 極限(註3)	單位
9.6×10^3	10	CFU/g

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以下測試之樣品係由申請廠商所提供並確認資料如下:

產品名稱: 鱈魚
樣品分裝: 請參考報告末頁樣品照片
產品型態: Superchilling
產品批號: 28day
申請廠商: 慶豐科技股份有限公司
製造日期: 2016/10/12
查驗日期: 2017/01/12
收樣日期: 2017/01/19
測試日期: 2017/01/20

測試結果:

測試項目	測試方法	測試結果	定量/偵測 極限(註3)	單位
★生菌數	衛生福利部部授食字第1021950329號公告修正食品微生物之檢驗方法-生菌數之檢驗。	3.2×10^5	10	CFU/g

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4. 低於定量極限/偵測極限之測定值以「未檢出」或「陰性」表示。
5. 測試項目名稱旁有加★者, 為通過衛生福利部食品藥物管理署認證項目。

- END -



連結至SGS安心資訊平台
聯絡人: 任志正 博士

- The total plate count test for Cod fillets Super-chilling preservation on day 28

測試結果	定量/偵測 極限(註3)	單位
3.2×10^5	10	CFU/g

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