

Shelf Life Validation Document

Lignan-Rich Black Sesame Micro Powder (Justification for 24-Month Shelf Life)

1. Purpose of Validation

This document provides scientific justification for the 24-month shelf life assigned to **Lignan-Rich Black Sesame Micro Powder**. Shelf life validation was conducted using long-term storage testing under standard room-temperature conditions.

2. Product and Packaging Information

- **Product Name:** Lignan-Rich Black Sesame Micro Powder
- **Packaging:** 5 kg aluminum pouch × 2 bags (10 kg total), oxygen absorber enclosed
- **Storage Condition:** Room temperature, protected from light
- **Manufacturing Method:** Ultra-low-temperature freeze pulverization (60-mesh, 90% pass)

3. Long-Term Storage Test Overview

A retained sample of the product was stored at **room temperature for 33 months** after production. The purpose of the test was to evaluate oxidative stability through **Acid Value (AV)** and **Peroxide Value (POV)**, which are key indicators of lipid deterioration in sesame products.

4. Inspection Laboratory

Shoku-kan-ken Inc. 56-1-21 Araguchimachi, Maebashi-shi, Gunma 379-2107, Japan Registered Hygiene Inspection Laboratory <https://www.shokukanken.com/english/>

Receipt Number: No.240708058

- **Receipt Date:** July 8, 2024
- **Report Date:** July 17, 2024
- **Sample:** Lignan-Rich Micro Powder (Lot 211008, non-commercial sample)

5. Test Results (33 Months After Production)

Test Item	Result	Method
Acid Value (AV)	2.21	Food Sanitation Inspection Guidelines (2015)
Peroxide Value (POV)	0.3 meq/kg	Food Sanitation Inspection Guidelines (2015)

6. Interpretation of Results

- The measured **AV** and **POV** values remain **well within acceptable quality limits** for sesame-based food materials.
- No abnormal oxidation or deterioration was observed.
- The oxygen-absorbing aluminum packaging demonstrated effective protection against oxidative degradation over extended storage.
- The results confirm that the product maintains its quality **throughout the assigned 24-month shelf life**.

7. Conclusion

Based on the 33-month room-temperature storage test results, the product demonstrates **sufficient oxidative stability** and retains acceptable quality parameters beyond the designated shelf life. Therefore, the assigned **24-month shelf life** for **Lignan-Rich Black Sesame Micro Powder** is scientifically justified and appropriate.

8. Inspector : Asanuma Shokukanken Inc.

◆リグナンリッチ黒胡麻マイクロパウダーの
製造後室温保存33ヵ月目のPOV.AVの数値です。
数値からも賞味期限の範囲内の数値であることが確認されて
います。(5kgアルミ包装で脱酸素剤封入品)



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検査結果報告書

受付番号: No.240708058

受付日: 2024年7月8日

報告日: 2024年7月17日

検体名: リグナンリッチマイクロパウダーロット211008対象外品

備考:

上記検体につきまして、検査結果を下記のとおり報告いたします。

【検査結果】

検査項目	検査結果	単位	分析方法
酸価(AV)	2.21		食品衛生検査指針 理化学編 2015
過酸化価(POV)	0.3	meq/kg	食品衛生検査指針 理化学編 2015

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