

The Implementation of Halal Management in Food Company: Qualitative study of Biscuits Production -KAMELO FOOD-

Isra NOUIOUAT¹

Master's degree in Quality Management at the
Higher National School of Management, Algeria.
Email: nouiouatisra@outlook.com

Yassamina MILOUD HOCINE

Master's degree in Quality Management at the
Higher National School of Management, Algeria.
Email: yassaminamiloudhocine@gmail.com

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Abstract

The increased demand for halal-certified products underscores the need for food companies to adopt effective halal management practices. This research aims to clarify how halal management can be applied effectively in the food industry with a specific focus on SARL KAMELO Food's experience in producing halal-certified cookies. A qualitative study has shed light on halal management's possibilities and challenges. This study has provided insights into the challenges and potential solutions for implementing halal certification in the food industry, which may have implications for producing halal-certified food products in collaboration with a Quality Manager and an Islamic and food science auditor, who possess extensive knowledge and experience in halal management practices. The findings highlighted the importance of collaboration, standardized processes, comprehensive training programs, internal audits, and the implementation of ISO or HACCPs' procedures in successfully managing halal requirements and meeting the growing demand for halal-certified products, with some deviations that need to be addressed.

Keywords: *Halal management, halal certified products, effective halal management practices, food industry.*

ملخص

مع التزايد في الطلب على المنتجات المصادق عليها بالحلال اعتمدت شركات الأغذية على تطبيق ممارسات فعالة لإدارة الحلال. من هنا تهدف هذه الدراسة إلى توضيح كيفية تطبيق إدارة الحلال بشكل فعال في صناعة الأغذية مع الاعتماد بشكل خاص على تجربة شركة SARL KAMELO Food في تصنيع المنتجات المعتمدة بالحلال، وذلك من خلال تسليط الضوء على إمكانيات وتحديات إدارة الحلال. ولتحقيق هدف الدراسة تم الاعتماد على المنهج النوعي من خلال الملاحظة و دراسة للملفات، إضافة إلى المقابلات الشفوية بالتعاون مع مدير الجودة ومدقق مختص في علوم الغذاء الإسلامي. قدمت هذه الأخيرة رؤى حول التحديات وال حلول المحتملة لتنفيذ شهادات الحلال في صناعة الأغذية، و التي مكنتنا من الوصول الى استنتاج أن أهمية التعاون، تتبع المعايير، تخطيط برامج تدريب شاملة، تنفيذ عمليات التدقيق الداخلية و إجراءات ISO و HACCP من شأنها تطوير إدارة حلال فعالة في صناعة الأغذية مع وجود بعض الانحرافات الواجب العمل عليها.

الكلمات الرئيسية: *إدارة الحلال، المنتجات المعتمدة الحلال، ممارسات إدارة الحلال الفعالة، صناعة الأغذية.*

¹ Corresponding author: E-mail: nouiouatisra@outlook.com

1. Introduction

The halal business has been a major force in recent years, making a name for itself in a number of industries, including Islamic food, Islamic finance, Islamic lifestyle, and Islamic tourism. Simply put, the idea of Halal refers to anything that is permitted in Islam. The halal business has flourished due in large part to a substantial global spike in knowledge regarding sustainability, ethical consumerism, green growth, and digitalization, according to the Statistical, Economic, and Social Research and Training Centre (2021).

The halal business has widened its impact into lifestyle items, owing to the exponential rise in the Muslim population worldwide (Mogran, et al., 2020). According to the DW documentary (2022)'s interview, in order to guarantee the quality, safety, and hygienic practices of these items, standardization, guarantees, and certifications are now required due to the growing demand for Halal products. Since they provide a sense of confidence and trust in the health sector, halal certifications are now essential for both Muslim and non-Muslim customers (Khasanah, et al., 2021).

In an interview for the DW documentary (2022), Susamma Schoroeder clarifies the intricacies of Halal certification organizations and highlights the significance of closely examining the certifying authorities and the criteria they uphold. Moreover, Basri and Kurniawati (2019) emphasize the significance of Halal certification as a safeguard and assurance for Muslims, permitting them to eat food items in accordance with Islamic teachings.

According to Alzeer & Abou Hadeed (2020), food safety and cleanliness are essential to the perceived quality of life in all countries, and health is seen as a fundamental human right. Mukhtar and Butt (2012) address the subjective nature of religious judgments for Muslims and suggest Halal certification or labeling as a solution; Hanamto & Rizkitysha (2020) agree.

Hence, the Standards and Metrology Institute for Islamic Countries (SMIIC) is one of the international bodies' leaders, whom accredit standardisation because of the difference requirements and certificates worldwide. Furthermore, the Statistical, Economic and Social Research and Training Centre for Islamic Countries (2021), mentioned that there are no worldwide-recognized scientific methodologies for determining the Halal status of food products.

The food business is undergoing a paradigm change due to the increasing demand for Halal goods. Organizations are increasingly fighting for a spot in the Halal food market, even those that have never been subject to Islamic dietary regulations. The DW documentary (2022) includes an interview with Kemar Calik that highlights the rise of a halal economy globally, using Nestle as a case study. Leading the halal industry, Nestle shows its dedication to halal principles by having a significant portion of its manufacturing facilities compliant with halal regulations.

The 1.9 billion Muslims worldwide spent a total of two trillion dollars, or 8.9 percent more, on Islamic consumer products in 2021 than they did the year before, according to recent figures from Bimp-eaga (2022). Hence, the food business, which is a major participant in the halal market, is estimated to be worth USD 922.7 billion in OIC nations in 2020.

Zaki Ahriz (2017), Head of Consumer Protection Federation, highlights the need of "Halal Labelling" as Algeria enters the global halal market. According to Rizki, Mohd Noor, and Ismail (2016), the Algerian halal business is very competitive, and in order to remain competitive in the global halal market, both the government and industry must pay attention to this fact.

Research Problem and Aim

In light of this, this research endeavours to understand the successful implementation of Halal management in the food industry. Building on previous research by authors such as Hakim et al. (2022), our primary objective is to address the question:

How to successfully implement Halal management in a food industry?

Using a qualitative research approach, we conducted semi-structured interviews with key industry stakeholders. This approach allows for a comprehensive exploration of viewpoints and experiences, offering valuable insights into the potential and obstacles associated with successfully implementing Halal management.

The next points will explore the theoretical foundations, obstacles, and prospects in Halal management. They will also provide specific study findings. To make a significant contribution to the field of Halal management in the Algerian food industry is the ultimate aim.

2. Literature Review

2.1 Halal Food Processing Essentials

2.1.1 Halal Certification and Concepts

Halal, which refers to what is allowed by Islamic Sharia, is commonly used by Muslims as a quality indicator (David, 2022; Praticto et al., 2020). According to Bergeaud-Blackler & Bernard (2013), Halal is seen by market actors as an extra feature or assurance in addition to religious conformity.

Research outlines the requirements for Halal products, with a focus on sanitation, cleanliness, and preventing cross-contamination during manufacturing (Bashir, et al., 2022). To keep the status of halal, physical segregation is essential throughout the production process and the whole supply chain. This procedure is guided by the principles of IHC, which guarantee the observance of religious obligations and the authenticity of Halal customs (Adam, et al., 2020).

Muslims consider halal certification to be a religious need (Bashir, et al., 2022), safeguarding both consumer rights and religious beliefs (Khasanah, et al., 2021). In addition to being compliant, it offers producers and consumers value by acting as a benchmark for quality standards in the food business (Rafi ki & Abdul Wahab , 2016).

2.1.2 Halal Supply Chain management

Peristiwo's study (2019), revealed that in the current era of halal food chains and halal science, the competition for halal food supplies is higher domestically (Malaysia in that case) than overseas. Consequently, halal food companies have to maintain production and other technology companies must respond to consumers more quickly. The study utilized a qualitative approach, generating descriptive data in the form of spoken and written words from people, as well as observing their behaviour, to create a comprehensive picture. Therefore, another important aspect of managing halal in the food industry is halal supply chain management. According to a study by Lukito & Islam (2020), HSC research is still in its early development stages. The study found five themes consisting of 24 different topics, including the engagement process, quality control assurance, critical success factors, the production and distribution process, and HSC operations support. The study suggests several main future research points to focus on. There have been several studies looking at the

challenges of implementing halal supply chain management, including issues related to logistics, transportation, and storage. Take Mohd, Haleem and Khan's research (2018), as an example, they highlighted various issues related to supply chain management in the halal meat industry, such as preserving the integrity of the halal certification process throughout the entire supply chain.

2.1.3 Halal Auditing and Inspection

Halal auditing is a crucial element in halal management in the food industry, as it helps to ensure the validity and reliability of information, people, organizations, processes, and systems. It provides reasonable assurance for the production and provision of Halal food. Given the complexities of modern food production, it can be difficult to know exactly what goes into the food we eat, which makes proper halal auditing even more essential (Farooqui, 2013).

Halal auditing practices have been a topic of interest in many studies, with several areas identified for improvement. For instance, Hanim Yusuf et al. (2017), conducted a study in Malaysia and found that the auditing process has some weaknesses, such as a lack of standardization and inconsistency in interpreting halal requirements. As part of their research, Mohd et al. (2018), also looked into the halal inspection process and emphasized its importance in a HC system where the end product is issued in the form of a halal certificate and logo. To further validate this notion, they collected data from interviews and observations to highlight the reality of HI, revealing that it is an important issue in the HC field. In addition to this, they spilled that the halal virtual inspection is a worthwhile topic to explore as it can significantly improve the quality of services in the HC sector in the future. Yet, the problem is that industry representatives can manipulate their justifications, making it impossible for auditors to determine the truth. Such deficiencies could seriously harm the halal authority's reputation (Muhammad, et al., 2020).

2.1.4 Halal Training and Education

Adequate training and education regarding halal are fundamental for successful halal management in the food industry. Various studies have highlighted the significance of imparting training on halal to employees in the food industry along with the requirement to educate consumers towards the halal certification process. For instance, a study conducted by Sherwani et al. (2018), elucidated that the employees in the food industry in Pakistan lacked pertinent knowledge pertaining to halal requirements, and consequently, there was an imperative need for enhancing training and educational programs in this domain.

Likewise, one of the challenges facing halal trainers is language and educational background, according to a study conducted by Harun et al. (2021). The study, which aimed to analyse the challenges faced by trainees, used a qualitative method of collecting data through interviews, and revealed that there are several bumps and hindrances that need to be overcome.

2.2 The implementation of Halal certification in different countries

Researchers and the general public dispute over halal certification. According to an analysis of Twitter attitudes by Hakim, Syahidah Mujahidah & Slamet Rusydiana (2022), there were 41.8% positive, 30.8% neutral, and 27.4% negative reactions. Notably, major participants in Halal certification Singapore, with its "Homogeneous in religion" and

Malaysia, with its "the religious order of the Federation is Islam" showed noteworthy Twitter involvement, coming in second and fifth.

2.2.1 Malaysia

According to the enlightening study by Abdul Majid et al. (2015), Malaysia is known for being a major center for halal cuisine and for being widely available. Zakaria (2008), highlights the government's aspirational goal of making Malaysia a global hub for halal, seeing the halal emblem as a model for foreign enterprises as well as a representation of religious devotion.

JAKIM, the halal certification body, states that the halal mark may only be used in conjunction with the phrase "Malaysia." Abdul Majid et al. The paper explores Malaysia's own halal concept and addresses the nation's particular problems and difficulties.

Malaysia establishes strict rules for the quality of halal food worldwide, tying the Malaysian halal certificate to credentials like MS1500 and general manufacturing guidelines. According to Che Din & Daud (2014), MS1500:2009 is regarded as a standard for halal food quality. The report highlights how comprehensively it covers the whole supply chain, from farm to consumer, and it identifies eleven crucial success elements for its implementation.

2.2.2 Singapore

Singapore has emerged as a strong advocate of halal procedures, even though it is not a predominantly Muslim nation. Singapore's dedication to growing its halal business is seen by the rise of MUIS-certified halal establishments to 5000 in 2015 (Rokshana , 2019).

Baharudin et al. (2016) state that legislation, standards, guidelines, certifying organizations, referrals, legal concerns, certification processes, and the recognizable halal mark are all closely related to halal certification procedures in the ASEAN region. Since 1978, MUIS has been the only recognized organization in Singapore with the authority to grant halal certifications in accordance with AMLA's Article 88A paragraph (1).

Regulations in Singapore requiring halal certifications for goods like as food, drinks, medications, and cosmetics are optional (Rokshana , 2019). According to Baharudin et al. (2016), the religious component (MUIS-HC-S001) and the technical component (MUIS-HC-S002) are the fundamental requirements for halal certification.

MUIS offers seven different halal certification programs and has four parts to its halal certification process: application submission, processing, certification, and post-certification. This methodical approach conforms to certain guidelines, protocols, certification criteria, and the Fatwa, in accordance with the Quran and Sunnah. The result of this procedure is reflected in Singapore's halal logo, which is a single, cohesive emblem.

2.2.3 Middle east countries

The Gulf countries in the Middle East led by Saudi Arabia, have come up with very sophisticated standards for meat and prepared foods, called "Gulf standards" which include guidelines and requirements related to foodstuffs (Mian N & Muhammad M, 2004). Those standards were established by the GCC (Heggum, C, 2016).

Ali et al. (2021), defined the GSO 2055-2:2015 standard as a set of guidelines developed by the GSO to provide a framework for halal certification bodies operating in Gulf countries. The standard set out the requirements and guidelines for halal certification bodies to ensure that they are operating in a transparent, consistent, and credible manner.

According to Jawad & Khaled (2020), the certification process in those countries has developed to assure the cleanness, safety, and conformity of the made product with Shari'ah,

also to carry out the site audit, which can be divided into three stages: documentation review, physical/ on-site audit and lastly reviews/ closing meeting.

2.2.4 *Algeria*

Algeria, a nation where Muslims predominate, has taken calculated steps to join the global halal industry. Based on the CIA World Factbook (2015), the country understands the significance of adhering to international halal standards, as virtually all of its citizens practice Islam.

As stated by Yun, Lee and Kim (2020), and in accordance with GAIN Report No.AG2022-0013 (2022), Algeria applied food safety regulations to both domestically produced and imported food items, which governed specifications for various types of food, the technical specifications for halal food, non-halal food, and the processing requirements for halal food, in addition to the international standards used are outlined in the Order published in JORA 20 No. 15 on March 19, 2014. While, consumer information requirements were mapped out in Decree 13-378 of November 9, 2013 (published in JO No.58 on November 18, 2013). Likewise, on December 8, 2016, an inter-ministerial meeting (published in JO No. 70 on June 14, 2016) established the conditions and procedures for labeling food products as halal.

According to the General Director of the Algerian Institute for Standardization in an interview (2017), the absence of a Halal certification made it difficult to export to Islamic nations, thus, in June 2017, Algeria formally introduced the Halal mark for food items.

The Algerian Institute for Standardization “IANOR” serves as the certifying authority for halal food products, and is overseen by the National Committee for Monitoring Certification, which is composed of members from important ministries (Nabila, 2022).

To access international markets that require a Halal certificate, the Algerian Minister of Trade, Rezig (2021), announced in an interview with Afrigate News Berkane (2021) that significant efforts have been made to develop and qualify quality facilities. He emphasized that the establishment of the National Committee responsible for monitoring promotion and implementing the Halal label in January 2021 was a critical step in this direction.

Additionally, The Algerian Consumer Protection Organization has confirmed that the first Halal product certificate was issued in Algeria in 2023, indicating that the National Institute for Standardization grants the certificate to any operator who meets the necessary requirements for its use in export operations (Eldine, 2023).

2.3 *Cross-referencing of countries' experiences*

The implementation of halal certification in food industry involves a number of steps and considerations. These have been grouped into six main components: understanding Halal certification requirements, certification Procedure, understanding laws and standards, securing certification, implementing processes and labelling. Table 1 summarises the different drivers identified in the literature.

Table 1: Cross-referencing of countries' experiences

	Malaysia	Singapore	Middle East countries	Algeria
Steps that can be taken to implement	- Training			
	- Supplier verification			
	- Facility design			
	- Documentation			
	- Certification			

halal management in the food industry	- Audits and inspections - Continuous improvement			
The Halal certification requirements	- Adoption of « GHP ». - Adoption of a suitable management system to the Islamic measures, with the purpose of hygiene and health safety.			
Certification Procedure	1-Voluntary pre-audit 2-Certification audit 3-Annual reviews 4-Re-certification every three years.			
Laws and standards	- MS1500:2009 Halal Food - Production, Preparation, Handling and Storage – General Guidelines (Second version)	- Religious: (MUIS-HC-S001): General Guidelines for the Handling and Processing of Halal Food. - Technical: (MUIS-HC-S002); General Guidelines for the Development and Implementation of a Halal Quality Management System (HalMQ).	- GSO 2055-2:2015 standard “Halal foods. Part 2: Guidelines for halal foods certification bodies.	- JO No. 15 on March 19, 2014 - Decree 13-378 of November 9, 2013 (published in JO No.58 on November 18, 2013) - Inter-ministerial meeting (published in JO No. 70 on June 14, 2016)
Authority certification bodies	Department of Islamic Development Malaysia “JAKIM”	the Religious Council of Singapore “MUIS”	- The Gulf Cooperation Council “GCC”. - Gulf Standards Organization “GSO”	- Algerian Institute for Standardization “IANOR “
	1-HAS « Halal assurance system » manual 2-Halal police 3-Halal executive 4-JKHD « Jawatankuasa Halal Dalman » means Dalman Halal Committee 5-Inan Halal Audit	- Application submission - Processing - Certification, - Post certification.	- Documentation review - Physical/ on-site audit - Reviews/ closing meeting.	- Audit request - An audit conducted by a team of two auditors (experts in food safety and good manufacturing & Islamic auditor)

Certification process	6-Halal Risk control	practices from IANOR.		
	7-Raw material control	- take samples to be submitted for analysis to a laboratory commissioned by IANOR.		
	8-Halal exercise			
	9-Traceability			
	10-HAS Review			
	11-Macmal Analysis			
	12- Sertu			
	13-documentations and Records.	- Audit report		
	14- certification audit	- Certification		
	(Write, 2020)			
Labeling				
	Source: (Baharudin , et al., 2016)	Source: (Baharudin , et al., 2016)	Source: http://en.gulftic-icsc.com/	Source: https://www.ianod.com/certification/la-marque-halal/

Source: developed by ourselves

This portion's table presents a comprehensive summary of the demands and processes for halal certification in a number of territories, including Malaysia, Singapore, Middle East countries and Algeria. The table gives additional information on the organizations in charge of halal certification in each nation, as well as the requirements that must be satisfied for a goods to be classified as halal. The table also offers information on the certifying bodies responsible for enforcing each nation's halal labeling laws as well as the laws themselves, and the necessary actions. This table's content is crucial for companies looking to enter new halal markets since it provides insightful information on the particular standards and procedures needed to gain halal certification in various nations.

3. Organizational Context

3.1 The presentation of the company PALMARY

PALMARY FOOD company with its industrial entity SOBCO SARL was established in 2007, It is a 100% Algerian company. The growth of PALMARY has been ongoing since 2008, when its first production facility in El-KHARROUBA (Boudouaou Industrial Zone in the wilaya of Boumerdes) was inaugurated. It has established a little more of a foothold in Algerian households' spending patterns by launching brands like Maxon in 2012. PALMARY has become a historic economic player in the wilaya of Boumerdes and intends to remain so in the future.

In the wilaya of Boumerdes, PALMARY has established itself as a significant economic force, and it aims to do so going forward. It operates in the field of biscuit,

chocolate and confectionery production in compliance with the technical requirements and regulations.

PALMARY's activities are well-structured and efficient. The organization maintains clear hierarchies and departmental collaboration, allowing for efficient processes and effective communication. As well, the General Management of SOBCO SARL must make sure that their goals are consistent with its strategic orientation while also taking into account the following:

- Its problems both inside and outside
- Expectations and requirements of the parties who matter
- Providing the resources required for the policy's implementation and ongoing improvement of the quality management system.
- Rely on every employee of the business to work together to adhere to the policy and please the interested parties.

Table 2: PALMARY's identity card

Full name of the company	PALMARY FOOD (SOBCO SARL)
Head office	El-KHARROUBA, Boudouaou Industrial Zone in the wilaya of Boumerdes
Mission	Offering goods that abide by all relevant legal and regulatory standards, as well as the expectations of its clients and other interested parties.
Product types	- Real Chocolate and Vegemite - Biscuits: dry, filled and wafers - Sponge cake - Spreads - Confectionery and sweets
Email	contact@palmaryfood.com
Tel	+21324989409
Site web	www.palmaryfood.com

Source: developed by ourselves

3.2 KAMELO Food group

SARL KAMELO food, is an agri-food industry that produces biscuits. The brand KAMELO FOOD is well-known for their cookies. It is the market leader in many biscuit segments and subcategories, but sandwich biscuits are its specialty.

In Algeria, the company we represent, KREMALI, has grown significantly in popularity and status. The second brand under KAMELO Food is PALMARY, the industry leader in mosaic cookies with significant room for expansion.

Other goods and brands, like PALMITO and MAXON, are easily accessible, demonstrating the qualities of KAMELO FOOD in providing high-quality goods with simple accessibility. Being able to serve a variety of markets in Algeria and export to other countries thanks to the large selection of products and brands allows it to successfully achieve a variety of goals.

3.3 Production process

The biscuit production process (**Annex A**), includes the following successive operations:

- Raw material (RM) and ingredients reception and control

- Mixing of RM and ingredients
- Skimming
- Kneading
- Baking of biscuits in 4 zones
- Biscuit cooling
- Preparing the cream
- Fodder and packaging
- Boxing and palletizing

4. Research Methodology

4.1 Method

This section will cover the research approach that was used to complete this project. In order to gain an overview of the implementation of the Halal management system in accordance with SMIIC, Codex Alimentarius, and Algerian normalization within the KAMELO food group.

This study adopts a qualitative research methodology. This approach draws on the research conducted by various authors, including Haziq Hassan et al. (2015) in their article on Knowledge and Practice for Implementing Internal Halal Assurance System among Halal Executives, as well as a review by Baharudin et al. (2016). Additionally, we were inspired by the work of Alharbi (2015). Our study is primarily based on the collection of qualitative data, facilitated through three key techniques.

4.2 Data collection

Document studies, participant observations, and semi-structured interviews are the most often employed data gathering techniques (Baharudin et al., 2016; Haziq Hassan, Arif and Sedik 2015; Alharbi, 2015). These data were gathered at various stages of the Halal management implementation process (**Table 3**) (Alharbi, 2015).

Table 3: Data collection tools

Adopted data collection tools	Description	Explication
Document studies	The term "document study" describes the researcher's examination of written sources. These can be both private and public records including diaries, annual reports, guidelines, policy documents, archives, and correspondence. During our internship, we looked over the company's website as well as internal records, which are regarded as a valuable source of accurate information. In alignment with the review conducted by Baharudin et al. (2016) titled "The	We have examined numerous documents concerning raw materials, including additives and primary ingredients. We have deepened into the specifics of these substances, analysing their compositions, properties, origins, and microbiological characteristics (Annex B).

	Potential of ASEAN in Halal Certification Implementation," we have utilized this tool.	
Participant observations	In a limited sense, observation can be described as a method for gathering visible and audible primary data. However, observation can also be explained in a more general sense as a specific method of interacting with the environment (Marie-Laure, et al., 2008).	We carefully observed every step of supply chain, from raw material reception to final product assembly. We tracked each stage, including reception of raw materials, transportation, storage, and manufacturing. This comprehensive analysis aimed to guarantee the hygiene of the final product.
Semi-structured interviews	Interviews are used to obtain insights into a person's subjective experiences, attitudes, and goals. A semi-structured interview is conducted by using an interview guide (or grille, or even canvas), or sort of list of themes/topics to discuss with each respondent. The questions are planned out in advance (Marie-Laure, et al., 2008). We have developed our interview guide based on the article about "Knowledge and Practice for Implementing Internal Halal Assurance System among Halal Executives" written by Haziq Hassan, Arif and Sedik (2015), and another one prepared by Alharbi (2015). Our interview guide is structured into three sections: basic inquiries, main questions and concluding question (Annex C).	In enrolling participants for semi-structured interviews, we invite interviewees to engage in open-ended discussions. This process entails identifying potential participants, extending invitations, and providing detailed information about the research objectives, confidentiality protocols, and planning meetings. Some interviewees were met in person, while others responded to us via email. This approach ensured a diverse range of perspectives and enriched our data collection process.

Source: developed by ourselves

4.3 Sample

Sample selection fundamentally encompasses the process of choosing the appropriate participants or sources for our study question. The selection of suitable interview's questions or interviewees was primarily based on the research conducted by Haziq et al. (2015).

In order to see the procedures, they have adopted in the company and to offer accurate information, we interviewed stakeholders who were either directly or indirectly involved in

the deployment of the Halal management system within the KAMELO's organization, it is summarized in table 4.

Table 4: The interviewed actors

N°	Interviewees' Function	The reason why
01	Quality Manager	Responsible for liaising with providers of Halal certification, overseeing certifications and standards.
02	Algerian External Islamic and food science auditor	Specialized expertise in Halal certification processes and auditing compliance.
03	Quality team's supervisor	Oversees implementation of quality control measures, including integration of Halal requirements.
04	Production Supervisor	Provides insights into practical implications of Halal certification on production operations.

Source: Developed by our care

Gathering perspectives from these essential stakeholders ensures a comprehensive examination of how the food industry implements Halal certification. Our interviews provide a diverse viewpoint, engaging individuals across various functions, including production operations, quality management, and auditing. This broad spectrum of insights enriches our thesis with valuable practical perspectives, enhancing our understanding of the complexities surrounding the acquisition and maintenance of Halal certification. Adopting such an inclusive approach fosters a holistic understanding of both the opportunities and challenges associated with Halal compliance, significantly contributing to the existing body of knowledge in this field.

5. Results

5.1 Diagnosis of PALMARY's company

After gaining a comprehensive understanding of the operation and numerous sectors of activity inside PALMARY's organization, focused on the KAMELO's unit. The next stage in implementing Halal management is to obtain every necessary document to ensure that goods and services are permissible for Muslims to use or consume and that they correspond to Islamic norms.

As a trainee for a project to implement a Halal management certification, we began with a review of the documents of the host organization's existing food ingredients and production process. We were also advised to go on a site visit, where we examined the complete production process, from raw materials to finished product, and used interview guidelines (the main goal of the interviews is to collect answers to the current status).

5.2 Knowledge and Attitude of Halal Certification

After conducting our internship at the "KAMELO" food industry and interviewing several industry experts, according to the results of our study, not all executives have a thorough understanding of how to implement halal certification; instead, many do use their general knowledge and understanding rather than their specific expertise of the practical applications. Producing goods that were halal-certified by IANOR and other certification bodies was the main objective of halal certification implementation. Aside from experts who have had the opportunity to establish a Halal system, they pointed out that the objective is to create 'safe' products that do not contain any non-Halal ingredients, manufactured and processed using equipment that has not been contaminated by non-Halal elements, under

strict hygienic conditions and in accordance with Islamic ritual practices; and Halal certification is essential for food establishments, as it certifies the production of high-quality food that meets stringent quality control standards. It distinguishes food establishments with it from those without it and is a powerful force in the market, making it a strategic move.

5.3 Efficient of halal Resources

According to this research, the KAMELO food group began by appointing an internal Halal Committee (IHC), which is tasked with ensuring compliance with Halal laws and monitoring the use of Halal procedures. In this regard, the IHC was aiming to achieve a successful halal certification, the committee started by acquired ingredients from certified Halal suppliers who adhered to Halal standards. Additionally, the IHC made verified that every other item used in the manufacturing process complied with Halal regulations. It also includes manufacturing procedures that adhere to Halal regulations, such as separating Halal and non-Halal items throughout production and ensuring that all manufacturing equipment is clean (implementation of HACCP² method).

To certify that the entire production process complies with Halal regulations, this entails going through an audit. The company acquired a halal certification from a halal certification agency, suitably this last labelled their food products. Furthermore, every worker involved in the manufacturing process was educated on the significance of conforming to Halal principles and their requirements, including the integration of ISO standards. The adoption of ISO standards, particularly ISO 9001 (Quality Management Systems), ensures a systematic approach to quality management throughout the organization. This not only enhances the overall efficiency and effectiveness of the production process but also provides a framework for consistent adherence to Halal principles. By aligning with ISO standards, the company demonstrates its commitment to quality and continuous improvement, which are essential aspects of Halal certification. Lastly, to guarantee continued adherence to Halal regulations, the organization was regularly inspected and tested food products (case of chocolate factory MOMENT).

In the case of KAMELO food group, they are currently in the process of implementing various systems, including the HACCP Method, and fulfilling the necessary requirements to obtain certification. These procedures align with the ones followed in the chocolate factory as described in Annex D.

5.4 Cleanliness and hygiene

The food industry has undertaken several initiatives to enhance cleaning procedures and uphold optimal hygiene standards. Among these initiatives is the establishment of a comprehensive cleaning program.

In this case, the effectiveness and execution of the cleaning program are critical factors. The management of the halal company has planned a continuous manufacturing equipment cleaning program as part of their commitment to producing safe and hygienic food.

Ensuring cleanliness and the production of safe food involves various measures to prevent contamination of prepared biscuits. One aspect is reducing the risk of accidental contact between the biscuits and chemical products, such as cleaner solutions, stored within the food premises. To address this risk, dangerous goods are kept separate from the areas where the biscuits are manufactured, packed, and stored, reducing the possibility of exposing the food to hazardous substances.

² HACCP: Hazard Analysis Critical Control Points, is a method of managing food safety that finds, analyses, and controls dangers across the food production and handling processes (Rosak-Szyrocka & Abbase, 2022).

In addition to these measures, promoting cleanliness among employees and maintaining a high standard of hygiene during food processing is paramount. They enforce certain dress code requirements for employees handling food. This includes wearing gloves, a hair net, and an apron. Furthermore, the installation of alcoholic gel dispensers at every entry and exit point has been implemented to further support hygiene practices within the facility.

Moreover, to ensure the cleanliness and adherence of final products to the desired standards, they have required for suppliers to provide microbiological analysis sheets for the raw materials. Besides, they have established a permanent control process for manufactured biscuits, conducting regular microbiological analyses (**Annex B**).

5.5 Compliance with Standard requirements

Table 5 summarizes the adherence to Standard requirements.

Table 5: Compliance with Standard requirements

Compliance with standard requirements	Compliance in Industry Documentation	Compliance Observed in Industry
General Requirements	Falling short of requirements	Yes
Transformation of foodstuffs	Partially compliant	Yes
Machines, Tools, Production Chains	Yes	Yes
Storage, Display, Service, and Transport	Yes	Yes
Hygiene, Sanitation, and Food Safety	Yes	Falling short of requirements
Validation and Verification	Yes	Yes
Identification and Traceability	Falling short of requirements	Yes
Packaging and Labelling	Yes	Yes
Legal Requirements	Yes	Yes

Source: Elaborated by our care.

The table presented above summarizes the adherence to standard requirements outlined in the Halal certification standards. The first row, titled 'Compliance with Standard Requirements,' lists all the specific requirements stipulated by the standard. These requirements encompass various aspects such as ingredient sourcing, production processes, packaging, and labeling, among others.

In the next row, labeled 'Compliance in Industry Documentation,' we have provided an assessment of the extent to which the industry documentation aligns with the standard requirements. This assessment is based on a thorough examination of industry practices and documentation, including policies, procedures, and records. For each requirement, we have indicated whether the industry documentation fully complies with the standard requirements ('Yes'), falls short of meeting the requirements ('Falling short of requirements'), or is partially compliant ('Partially compliant').

Similarly, in the third row titled 'Compliance Observed in Industry,' we have evaluated the actual implementation of the standard requirements within the industry. This evaluation is based on observations made during site visits, interviews with key personnel,

and reviews of production processes. As with the documentation assessment, we have provided commentary on the level of compliance observed, indicating whether the industry practices fully adhere to the standard requirements, fall short, or are partially compliant.

This dual assessment of both documentation and observed practices offers a comprehensive overview of the industry's adherence to Halal certification standards. It highlights areas of alignment as well as potential gaps or areas for improvement, providing valuable insights for stakeholders involved in ensuring Halal compliance within the food industry.

5.6 The consensus list

- Employees' varying levels of familiarity and comprehension with halal certification.
- The majority of local suppliers do not have halal certification (halal requirement).
- Two of our international suppliers do not possess halal certification.
- A few of the suppliers without the halal label do not mention the ingredients on the product specification sheet.

5.7 Strengths

- The implementation of HACCP method.
- Presence of the required documents.

6. Discussion

A thorough understanding of halal certification concepts, halal auditing and inspections, and halal education and training are necessary for the implementation of halal certification in the food business. Our consensus list shows that there are considerable challenges in safeguarding the integrity of the halal supply chain due to employees' differing levels of awareness and understanding with halal certification. The bulk of local vendors also lack halal certification, which makes the implementation procedure more challenging,

Also, two of our suppliers from outside do not have halal certification, making them a possible risk to the integrity of halal. To prevent misconceptions and to make sure that the certification procedure complies with legal standards, it is essential to take into account the halal criteria of each nation.

For example, the study conducted by Che Din & Daud (2014) highlighted the critical success factors for implementing MS1500:2009 in their nation, which were identified through previous studies and the involvement of experts in the field. The comprehensive nature of MS1500:2009 was emphasized, as it covers the entire food production process from farm to consumer, providing guidelines for producers to ensure high-quality halal products. Baharudin et al. (2016) further discussed the subdivision of halal certification standards into religious and technical components, highlighting the specific guidelines for handling, processing, and implementing a halal quality management system.

It is challenging for us to confirm the halal status of a few vendors who do not have the halal mark since they do not list the ingredients on the product specification sheet. To reduce the possibility of contamination, it is crucial to stress the significance of recognizing and tracking halal ingredients.

Overall, the application of halal certification in the food industry is fraught with difficulties that call for thorough familiarity with halal regulations, good coordination with suppliers, and enough employee training. To safeguard the integrity of the halal supply

chain, the implementation process should also take regulatory frameworks into account and cross-reference experiences from various countries.

According to Haziq, Arif & Sidek (2015)'s study, it was found that not all executives possess a precise understanding of IHAS³, and only a limited number of them have sufficient knowledge and skills regarding IHAS. Most executives were unable to provide accurate responses regarding the objectives and meaning of IHAS. In this case, it appears that IHAS implementation is based on their general knowledge and understanding, lacking specific knowledge about the actual practices of IHAS. The primary focus of implementing IHAS was to ensure the use of raw materials certified as halal by JAKIM, JAIM, and other accredited certification bodies.

And based on the findings of our study, it is evident that there is a lack of comprehensive understanding among executives regarding the implementation of halal certification. This lack of knowledge can have several detrimental effects, such as the acquisition of invalid halal certificates or the inability to obtain them altogether.

Furthermore, insufficient knowledge also contributes to non-compliance with halal requirements, resulting in a compromised integrity of the certification and giving rise to ethical and religious concerns among consumers.

Hence, it is necessary for responsible to invest in acquiring the essential skills to effectively implement halal certification, thus mitigating these effects. This can entail attending training sessions, contacting halal certification organizations for advice, speaking with business leaders, and keeping up with the most recent advancements and industry best practices in halal certification. They can safeguard the integrity of halal certification and adhere to regulations.

Abd Kadir et al. (2016) and Praticto et al. (2020) both discuss the importance of Halal compliance and highlight various criteria associated with controlling cleanliness, hygiene, and cross-contamination in different stages of production, manufacturing, on-farm facilities, and slaughtering facilities. They emphasize that maintaining physical segregation is crucial not only during the production phase but also throughout the entire supply chain to uphold the Halal status of products.

On the other hand, Jawad & Khaled (2020) focus on the certification process in these countries, emphasizing its role in ensuring the cleanliness, safety, and conformity of products with Shari'ah principles. They outline the three stages of the site audit, which include documentation review, physical/on-site audit, and a final review/closing meeting. This comprehensive certification process aims to guarantee adherence to Halal standards and the principles of Islamic law.

Overall, these studies highlight the significance of maintaining cleanliness, hygiene, and physical segregation throughout the production and supply chain processes to ensure Halal compliance. The certification process plays a crucial role in verifying and affirming the adherence of products to Halal requirements, providing assurance to consumers and stakeholders alike.

When it comes to maintaining cleanliness, the management of the KAMELO's company encountered difficulties in ensuring employee compliance with the designated cleaning schedule. Despite implementing all the necessary hygiene procedures, it was challenging to guarantee that every employee consistently followed these practices. Thus, it is imperative to put severe punishments for breaking the rules.

7. Conclusion

³ IHAS: Internal Halal Assurance System, is a system that ensures the integrity of halal food at the processing stage, thereby ensuring the production of halal and quality food (Haziq Hassan, et al., 2015).

This thesis explores how important halal certification is to the world food industry. Its importance is highlighted by the thorough examination of case studies and literature for global manufacturers and consumers. In addition to guaranteeing adherence, halal certification fosters customer confidence, creates opportunities, and improves food safety and sanitation.

Careful preparation, education, and communication are essential for a successful adoption. It is recommended that stakeholders work together to provide strong training programs and established procedures. When halal certification is applied correctly, it provides a competitive advantage that drives the worldwide expansion of the halal business. Internal audits are necessary to ensure adherence to regulations.

Halal management success is improved by the supported HACCP method and ISO. The food sector guarantees the manufacture of high-quality halal goods that satisfy customer preferences and legal requirements by adhering to these guidelines.

But it's important to recognize the limitations of the study. Results validity and generalizability may be impacted by semi-structured interviews' small sample size and subjective bias. Quantitative rigor and comparability with other businesses are lacking in the qualitative insights derived by KAMELO's processes.

To sum up, making sure that halal compliance goes beyond market factors. Because halal practices are sensitive and have religious ramifications that affect thousands of people's beliefs, strict adherence to regulations is essential. This obligation highlights the necessity of industry-wide dedication and ongoing enhancement of halal certification procedures.

Acknowledgment

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ANNEXES

ANNEX A

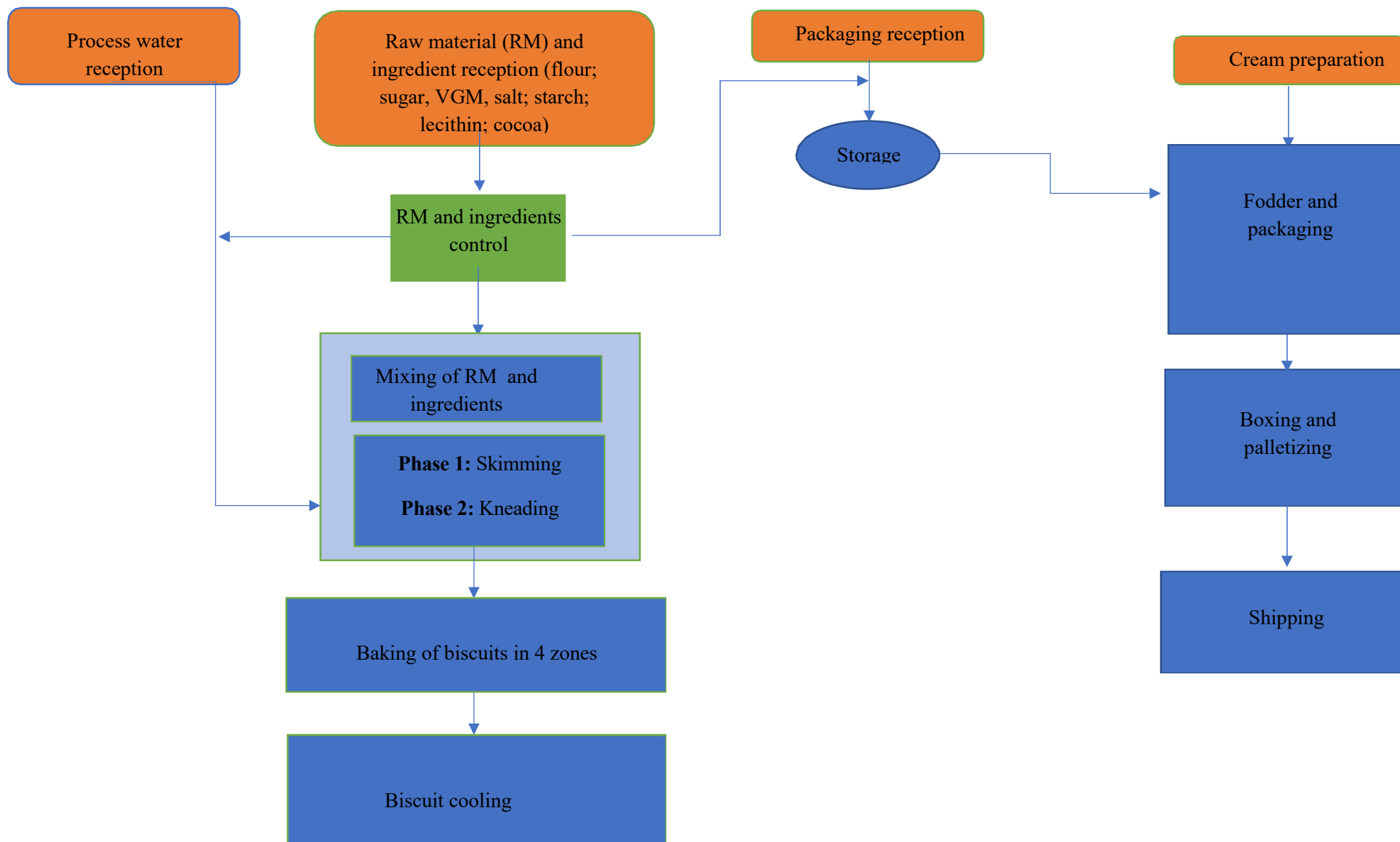
PRODUCTION PROCES



SARL KAMELO FOOD

Biscuit preparation and production flow chart

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ANNEX B

ANALYSED DOCUMENTS



FICHE TECHNIQUE



NOM ET REFERENCE DU PRODUIT : Arôme Beurre 5668

DÉSCRIPTION :

Produit aromatique industriel, non destiné à la consommation directe.

DOMAINE D'UTILISATION :

Produit conçu à des fins alimentaires, destiné à être utilisé en biscuiterie, pâtisseries, confiserie et glace.

CARACTÉRISTIQUES PHYSICO-CHIMIQUES

- Goût : Goût beurre.
- Aspect : Liquide jaune translucide.
- Densité à 20°C : 0,910 – 0,955
- pH à 20°C : 5,0 – 6,0

COMPOSANTS :

- Substances Aromatiques.
- Support : Huile végétale.

CRITÈRES MICROBIOLOGIQUES :

Germes	Normes
Coliformes totaux : 00	< 10 ²
Germes aérobies à 30°C : 00	< 10 ⁴
Escherichia-Coli : 00	< 10
Levures et Moisissures : 00	< 10 ³
Staphylocoques à coagulases : 00	< 10
Salmonella : Absence	Absence

DOSAGE RECOMMANDÉ : < 1 g/L.

CONSERVATION ET STOCKAGE : Vingt quatre mois à partir de la date de fabrication, le produit doit être stocké dans un lieu frais à l'abri de la chaleur et de la lumière.

Département recherches et analyses



SARL FAROMCOL, UNITE DE PRODUCTION ET DE RECHERCHE.

CAPITAL : 44 700 000.00 DA

RC: 98 B 0102527 - Art fiscal: 31070102091 - NIF: 099831010252798

Adresse : ZONE INDUSTRIELLE N°2- ES - SENIA. B.P 156. 31100 – ORAN - (ALGERIE) .

Siege Social : 92 RUE DE MOSTAGANEM - ORAN - (ALGERIE).

Tel : 041 61 77 76/61 77 82 - MOB : 05 55 08 24 67/70/71 -Email : commercial@faromcol.com / laboratoire@faromcol.com

Site web : www.faromcol.com



FICHE TECHNIQUE



NOM ET REFERENCE DU PRODUIT : Arôme Noisette double concentré

DÉSCRIPTION :

Produit aromatique industriel, non destiné à la consommation directe.

DOMAINE D'UTILISATION :

Produit conçu à des fins alimentaires, destiné à être utilisé en biscuiterie ; pâtisseries et Chocolaterie.

CARACTÉRISTIQUES PHYSICO-CHIMIQUES

- Goût : Goût noisette.
- Aspect : Liquide translucide.
- Densité à 20°C : 1,015 – 1,040
- pH à 20°C : 5,0 – 6,0

COMPOSANTS :

- Substances aromatiques identiques aux naturelles
- Support : Propylène Glycol USP (SIN-1520)

CRITÈRES MICROBIOLOGIQUES :

	Normes
Germes	$< 10^2$
• Coliformes totaux : 00	$< 10^4$
• Germes aérobies à 30°C : 00	< 10
• Escherichia-Coli : 00	$< 10^3$
• Levures et Moisissures : 00	< 10
• Staphylocoques à coagulases : 00	Absence
• Salmonella : Absence	

DOSAGE RECOMMANDÉ : 1 à 2g/L.

CONSERVATION ET STOCKAGE : Vingt quatre mois à partir de la date de fabrication, le produit doit être stocké dans un lieu frais à l'abri de la chaleur et de la lumière.

Département recherches et analyses



SARL FAROMCOL, UNITE DE PRODUCTION ET DE RECHERCHE.
CAPITAL : 44 700 000.00 DA

RC: 98 B 0102527 - Art fiscal: 31070102091 - NIF: 099831010252798

Adresse : ZONE INDUSTRIELLE N°2- ES - SENIA. B.P 156. 31100 – ORAN - (ALGERIE).

Siege Social : 92 RUE DE MOSTAGANEM - ORAN - (ALGERIE).

Tel : 041 61 77 76/61 77 82 - MOB : 05 55 08 24 67/70/71 -Email : commercial@faromcol.com / laboratoire@faromcol.com

Site web : www.faromcol.com



AROMATECH ALGERIE
 PRODUCTION D'AROMES ALIMENTAIRES
 Baba Ali - Zone d'activité Oued el Kerma, Lot N°38
 Saoula - 16095 Alger - ALGERIE

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FRM-LCQ0001

BULLETIN D'ANALYSE
CERTIFICATE OF ANALYSIS

Identification du produit / Product Identification

Nom du produit / Product Name : **AROME BEURRE**
AROME BEURRE
 Référence / Code Number: **7.19373**
 Numéro de Lot / Batch number : **012308017**
 Date de fabrication / Manufacturing date : **28/02/2023**
 DDM (Date Durabilité Minimale) / Best before date : **28/02/2024**

Analyses organoleptiques/Sensorial analysis

	Results	Specifications	Interpretation
Aspect / Appearance	Liquide		Conforme/Conform
Couleur / Color	Jaune		Conforme/Conform
Odeur / Odour	Conforme/Conform	caractéristique/characteristic	Conforme/Conform
Goût / Taste	Conforme/Conform	caractéristique/characteristic	Conforme/Conform

Analyses physico-chimiques/Physico chemical analysis.

	Results	Specifications	Interpretation
Densité / Specific gravity 20/20°C	1.096	1.082 - 1.112	Conforme/Conform
Indice de Réfraction / Refractive index 20°C	1.433	1.420 - 1.450	Conforme/Conform
pH 20°C		0.000 - 0.000	Conforme/Conform
Point éclair / Flash point (±2°C)		0.000 - 0.000	Conforme/Conform
Degré Brix / Brix 20°C			Conforme/Conform
Extrait sec / Dry matter 100°C (%)			Conforme/Conform
Acidité /Acidity: Ac Cit Monohyd (g/kg)			Conforme/Conform
Acidité /Acidity: Ac Cit Monohyd (g/l)			Conforme/Conform
Densité Optique/Optical density			Conforme/Conform

Analyses microbiologiques/Microbiological analysis

Nos produits sont stabilisés microbiologiquement. Au regard de leur faible charge microbienne, nous n'effectuons pas d'analyses.
 Our products are microbiologically stable. Due to their low microbial load, we do not perform any analysis.

Code Client /Customer Code: 4110002138 SARL KAMELO FOOD

Date édition : 28/02/2023

Date création : __/__/__

Date révision: __/__/__

Version :



AROMATECH ALGERIE
PRODUCTION D'AROMES ALIMENTAIRES
Baba Ali - Zone d'activité Oued el Kerma, Lot N°38
Saoula - 16095 Alger - ALGERIE

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FRM-LCQ0001

**BULLETIN D'ANALYSE
CERTIFICATE OF ANALYSIS**

Identification du produit / Product Identification

Nom du produit / Product Name : AROME BEURRE
AROME BEURRE
Référence / Code Number: 7.19373
Numéro de Lot /Batch number : 012308017
Date de fabrication /Manufacturing date : 28/02/2023
DDM (Date Durabilité Minimale) / Best before date : 28/02/2024

Informations complémentaires/ Additional informations

VALIDATION / APPROVAL	
DATE	
QUALITY CONTROL DEPARTEMENT	

Code Client /Customer Code: 4110002138 SARL KAMELO FOOD

Date édition : 28/02/2023

Date création : __/__/__

Date révision: __/__/__

Version :



BULLETIN D'ANALYSES BP2023/00028

Date 27/02/2023

Désignation : AROME NOISETTE

Référence : VIDA10030

Quantité Produite : 100Kg

N° Lot : BP2023/00028

Date de fabrication : 27/02/2023

DLUO : 27/02/2024

Client : KAMELO FOOD

	Mesures	Min	Max	Méthode
Aspect :	Liquide	/	/	/
Couleur :	Marron Claire	/	/	/
Odeur & Goût :	Caractéristique	/	/	/
Densité (20°C) :	1,052	1,031	1,061	NFT75-111
Brix (20°C) :	46	39	53	NFT75-112
Indice de réfraction (20°C) :	1,412	1,397	1,427	NFT75-112
pH (20°C) :	/			FCC III
Acidité (acide citrique monohydraté) :	g/Kg	/		FCC III
	g/L	/		
Indice formol :	/			
Densité optique (20°C) :	/			
Extrait sec (% - 100°C) :	/			
Microbiologie :				
Levures (nb/g) :	/			
Moisissures (nb/g) :	/			
Flore totale (nb/g) :	/			

Contrôles physicochimiques et organoleptiques : Conformes



Service Qualité
MK

SARL VIDAROME
Adresse : Route de OUED ALLAYEG GRP 118 SEC 04
BENI MERED - BLIDA - ALGERIE
Tél : +213 25 48 54 97 / Mobile : +213 550 225 225
rd.khelifi@vidarome.com
WWW.VIDAROME.COM



AROMATECH ALGERIE
 PRODUCTION D'AROMES ALIMENTAIRES
 Baba Ali - Zone d'activité Oued el Kerma, Lot N°38
 Saoula - 16095 Alger - ALGERIE

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FRM-ICQ0001

BULLETIN D'ANALYSE
CERTIFICATE OF ANALYSIS

Identification du produit / Product Identification

Nom du produit / Product Name : AROME CREME VANILLE
 AROME CREME VANILLE
 Référence / Code Number: 7.48583
 Numéro de Lot /Batch number : 012249011
 Date de fabrication /Manufacturing date : 07/12/2022
 DDM (Date Durabilité Minimale) / Best before date : 07/12/2023

Analyses organoleptiques/Sensorial analysis

	Results	Specifications	Interpretation
Aspect / Appearance	Liquide		Conforme/Conform
Couleur / Color	Jaune pâle		Conforme/Conform
Odeur / Odour	Conforme/Conform	caractéristique/characteristic	Conforme/Conform
Goût / Taste	Conforme/Conform	caractéristique/characteristic	Conforme/Conform

Analyses physico-chimiques/Physico chemical analysis.

	Results	Specifications	Interpretation
Densité / Specific gravity 20/20°C	0.933	0.910 - 0.940	Conforme/Conform
Indice de Réfraction / Refractive index 20°C	1.478	1.458 - 1.488	Conforme/Conform
pH 20°C		0.000 - 0.000	Conforme/Conform
Point éclair / Flash point (±2°C)		0.000 - 0.000	Conforme/Conform
Degré Brix / Brix 20°C			Conforme/Conform
Extrait sec / Dry matter 100°C (%)		0.000 - 0.000	Conforme/Conform
Acidité /Acidity: Ac Cit Monohyd (g/kg)		0.000 - 0.000	Conforme/Conform
Acidité /Acidity: Ac Cit Monohyd (g/l)		0.000 - 0.000	Conforme/Conform
Densité Optique/Optical density			

Analyses microbiologiques/Microbiological analysis

Nos produits sont stabilisés microbiologiquement. Au regard de leur faible charge microbienne, nous n'effectuons pas d'analyses.
 Our products are microbiologically stable. Due to their low microbial load, we do not perform any analysis.

Code Client /Customer Code: 4110002138 SARL KAMELO FOOD

Date édition : 06/12/2022

Date création : _/_/

Date révision: _/_/

Version :



AROMATECH ALGERIE
PRODUCTION D'AROMES ALIMENTAIRES
 Baba Ali - Zone d'activité Oued el Kerma, Lot N°38
 Saoula - 16095 Alger - ALGERIE

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FRM-LCQ001

BULLETIN D'ANALYSE
CERTIFICATE OF ANALYSIS

Identification du produit / Product Identification

Nom du produit / Product Name : **AROME CREME VANILLE**
AROME CREME VANILLE
 Référence / Code Number: **7.48583**
 Numéro de Lot /Batch number : **012249011**
 Date de fabrication /Manufacturing date : **07/12/2022**
 DDM (Date Durabilité Minimale) / Best before date : **07/12/2023**

Informations complémentaires/ Additional informations

VALIDATION / APPROVAL	
DATE	
QUALITY CONTROL DEPARTEMENT	



Code Client /Customer Code: **4110002138** **SARL KAMELO FOOD**

Date édition : **06/12/2022**Date création : **_/_/___**Date révision: **_/_/___**

Version :



ACG SIM SPA
Filiale du Groupe SIM S.P.A



Date : 28/05/2022

Contrôle Qualité Certificat D'analyse

Type d'huile : Raffinée 100% Soja

Date D'analyse : 28/05/2022

Client : KAMELO

NUMERO DE CAMION : 000374-516-16

NUMERO DE CITERNE : 03706-809-06

Teste	Standards	Resultats
Couleur L5 (Y / R / B)	Max 20Y/2R	3.2/0.2/ 0,01
Indice De Peroxyde (meq O2/Kg)	Max 1	0.35
Acidité Oléique (%)	Max 0.1	0.06
Eau et Matières Volatiles (%)	Max 0.1	0.02
Phosphore (ppm)	Max 5	1
Savon (ppm)	Negatif (-ve)	0
Impuretés	Negatif (-ve)	0
Goût / Odeur	Neutre / Neutre	Ok / Ok
Densité	/	0.9161 g/cm ³
Durée de validité	Une année	Production Date 25/05/2022

Numéro de scellées : 057651-057652-057653-057654

Département Contrôle Qualité



Address : Groupe de Propriété 69 et 67 El- Hamoul Section 13 31110 Oran – Algérie

Tel : 0560 90 82 29

N° RC 31/00-0809244B16 Numéro d'identification Fiscales 001609080924405

	FICHE DE CONTRÔLE DES CAMIONS DE TRANSPORT DES PRODUITS FINIS DE LA MARGARINERIE	N° Réf :	F-MRG-102
		Date de révision :	14 Mars 2018
		Version :	9

N° d'immatriculation de la cellule frigorifique: 000560-815-16

N° BA : CC3E52207747

Date et heure d'expédition : 03/07/2012

Désignation du produit : SHORTEH/AG 38/40

	État de la cellule frigorifique	Conforme	Non conforme
1.	Humidité	<i>C</i>	
2.	Propreté de la cellule	<i>C</i>	
3.	Absence d'odeur désagréable	<i>C</i>	

	État hygiénique de la remorque	Conforme	Non conforme
1.	Intégrité de la remorque (absence de trous et de corrosion.....)		
2.	Propreté du plateau (absence d'huile, eau, boue et débris divers)		
3.	Absence d'odeur désagréable (Cas d'un conteneur)		
4.	Présence de bâche		

Température de la cellule avant chargement (MRG)	Température de la cellule en fin de chargement (MRG)	Température de la cellule au déchargement (CLR)
<i>06°C</i>	<i>06°C</i>	

Le chef de quai et le chauffeur doivent contrôler la conformité du chargement des produits en quantité et qualité (vérification de l'intégrité des palettes)

NB : Les températures de chargement et du transport des produits margarinerie sont :

Margarines de table : 12°C

Margarine de feuilletage, graisse végétale et Smen : max 25°C

Beurre MDN : -18°C

Beurre tendre gourmand : Max 6°C

NB : La température de chargement et transport du beurre tendre gourmand de la margarinerie vers le dépôt TEMZRIT est de 0°C

*Le chargement n'est autorisé que si toutes les conditions de conformité (quantité et qualité) sont réunies.

Visa du chef de quai

Visa du chauffeur

Visa du chef CLR



PILAB
LABORATOIRE D'ESSAIS ET D'ANALYSE DE LA QUALITE
autorisé par le ministère du commerce sous le n°: 005/2019

N° inscription: 292/2023 (11029)
Prélevé le: 22-03-2023
Réceptionné le: 22-03-2023
Date d'analyse: 22-03-2023
Nbre Echantillon: 5
Poids - 36 g
N° lot: 3079

Demandeur: EURL KAMELO FOOD
Adresse: RUE FEHAS MOHAME RTE OUEDI ELAIK CENTRE ZAOUA
Produit: PRODUITS DE BISCUITERIE
(Biscuit MAXON GOLDEN fourré à la crème cacao)
Date fabrication: 20-03-2023
Date peremption: 20-09-2024

- prélèvement fait par les soins du laboratoire
- ce rapport d'analyse est délivré en un seul exemplaire original et reste valable uniquement que pour le lot ou l'échantillon soumis à l'analyse

Bulletin d'analyse Microbiologique

Examen préliminaire :

- Aspect et Couleur : Biscuit rond de couleur beige fourré à la crème cacao
- Odeur : Absence d'odeur étrangère au produit
- Etiquetage et Emballage : Conforme selon le décret exécutif n°13-378 du 18 novembre 2013
- Examen microscopique : Absence de matière étrangère au produit

Résultats :

Paramètres recherchés	E1	E2	E3	E4	E5	m	M	Réf/Méthode
Germe aérobies à 30°C - UFC/g	inf 100	inf 100	inf 100	inf 100	inf 100	1000	10000	NA 1207
Staphylococcus à coagulase ++ - UFC/g	inf 10	inf 10	inf 10	inf 10	inf 10	100	1000	ISO 6888
Salmonelles - UFC/25g	abs	abs	abs	abs	abs	/	Absence	NA 1203
Escherichia coli - UFC/g	inf 1	inf 1	inf 1	inf 1	inf 1	3	30	NA 6803
Molécules - UFC/g	inf 10	inf 10	inf 10	inf 10	inf 10	100	1000	NA ISO 31537-2

Conclusion :

la qualité du produit est: SATISFAISANTE selon: Arrêté interministériel du 04 octobre 2016 fixant les critères microbiologique des denrées alimentaires (JORA n°39 juillet 2017)

Bulletin établi le: 27-03-2023
le responsable:



T LAMMAM

autorisé par le ministère du commerce sous le n°: 005/2019

N° inscription: 185/2023 (10000)

Prélevé le: 19-02-2023

Réceptionné le: 19-02-2023

Date d'analyse: 19-02-2023

Nbre Echantillon:1

Volume - 750 ml

N° lot:

Demandeur:EURL KAMELO FOOD

Adresse: RUE FEHAS MOHAME RTE OUEDI ELAIK CENTRE ZAOUIA

Produit: EAU DE CONSOMMATION HUMAINE

(Eau de process)

Date fabrication: 19-02-2023

Date peremption: 22-02-2023

- prélèvement fait par les soins du laboratoire

- ce rapport d'analyse est délivré en un seul exemplaire original et reste valable uniquement que pour le lot ou l'échantillon soumis à l'analyse

Bulletin d'analyse Microbiologique

Examen préliminaire :

- Aspect et Couleur : Liquide incolore
- Odeur : Absence d'odeur étrangère au produit
- Etiquetage et Emballage : Absence d'étiquetage
- Examen microscopique : Absence de matière étrangère au produit

Résultats :

Paramètres recherchés	E1	E2	E3	E4	E5	m	M	RéfMéthode
Anaérobies sulfite-réducteurs à 45 °C - UFC/50ml	ABS					Absence		NA 15527-2
Escherichia coli- UFC/250ml	ABS					Absence		NA 764
Entérocoques - UFC/250ml	ABS					Absence	Absence	NA 766

Conclusion :

la qualité du produit est: SATISFAISANTE selon: Arrêté interministériel du 04 octobre 2016 fixant les critères microbiologique des denrées alimentaires (JORA n°39 juillet 2017)



183,cm/ ABDELMOUEN 3 S/O/ ABDELKADER BLIDA - B/M
Mobile: 025246972 | E-mail : pilab_slg@yahoo.fr | /



La qualité était autrefois contrôlée, elle est aujourd'hui conçue et assurée

Document élaboré le 20/02/2023 - Page 1/1

ANNEX C

AN INTERVIEW GUIDE

AN INTERVIEW GUIDE

This is intended for Experts in the Agri-food sector

Introduction

Greetings, Madam/Sir. kindly allow us to say hello. At the National School of Management (ENSM), Koléa, I'm Isra NOUIOUAT and my colleague Yassamina MILOUD HOCINE, second-year master's students studying quality management. We would like to speak with you in a brief interview to discuss our study on the application of halal management in the food business. We have selected the agribusiness sector, and more specifically the role played by halal certification in this sector. Please be aware that your answers will be kept completely secret and presented anonymously.

Objectif

In order to comprehend the mechanisms enforcing halal management among consumers, our work aims to investigate and clarify how halal management can be used successfully in the food business.

Table 1: Mapping between the categories and Interview Questions

Categories	Interview Questions
Basic inquiries	- Please describe your present position, including your duties and responsibilities. - What qualities are most crucial for your job, in your opinion? - Normally, how do you keep up with current breakthroughs in your field? - What prior experience do you have with the subject of this study?
Main questions	- What does the concept of Halal mean? - Do you think it's important that halal certification is being used in the food industry? - What are the general steps to follow for obtaining halal certification? - What are some of the main obstacles to implementing halal in your work, in your knowledge?

	- Can you give a list of any effective tactics or techniques you have adopted to deal with these problems? - What changes to your organization's halal management do you think would be most fruitful? - Which external bodies are involved in this certification process? - What is external control, and is it necessary? - At what stage does external control come into play, and why?
Concluding Questions	- What are the key factors which might help the food industry to successfully apply halal management, in your opinion?

Acknowledgements

We are grateful for your willingness to participate in this interview and for generously sharing your time and insights with us. We will certainly keep you informed of the findings of our research. Thank you, and goodbye!

Guide references

We have developed our interview guide based on the article about Knowledge and Practice for Implementing Internal Halal Assurance System among Halal Executives written by Haziq Hassan, Arif and Sedik (2015), and another one prepared by Alharbi (2015).

ANNEX D

HALAL CERTIFICATION PROCESS

