From Compliance to Competitive Edge: The Strategic Value of MS2400-3:2019 in Halal Retailing

Nik Mohamad Ridhwan[1*], Abdul Hadi Samsi[2], Mohd Daud Awang[1]

[1]Halal Products Research Institute, Universiti Putra Malaysia, Malaysia

[2]Centre of Human Sciences, Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia

ABSTRACT

This paper offers a critical review of MS2400-3:2019, Malaysia's flagship standard for halal supply chain management in retail. As global demand for halal products rises, ensuring integrity at the consumer interface is essential. The standard provides a flexible framework adaptable across retail formats, yet adoption remains low due to operational, financial, and human capital barriers. Through comparisons with international standards—including those from Indonesia, Brunei, the UAE, Australia, and Japan—this study identifies key implementation gaps and alignment opportunities. Strategic integration with systems like ISO 22000, and the use of technologies such as blockchain and RFID, are highlighted for enhancing traceability and compliance. Recommendations include tailored implementation guides, financial incentives, and public awareness efforts to support wider adoption. Future research should explore economic viability, technological applications, and cultural adaptation. With focused interventions, MS2400-3:2019 holds strong potential to become a global benchmark for halal retail governance—supporting both consumer confidence and commercial growth.

Keywords: Halal retail, Halal industry, MS2400-3:2019, halal certification, Malaysian Standard

INTRODUCTION

The global halal market is experiencing exponential growth, with projections estimating a market size exceeding USD 2 trillion by the late 2020s (Masood, 2022). This expansion signifies a surging worldwide demand for halal-certified products and services that extends far beyond the traditional confines of Muslim-majority nations. As halal principles gain prominence, their scope has broadened considerably. No longer restricted to dietary regulations, halal now encompasses every stage of the product lifecycle—from sourcing and production to distribution and retail—emphasizing ethical practices, sustainability, and transparency (Atieqoh et al., 2023). In this evolving landscape, maintaining halal integrity across the entire supply chain, particularly at the critical retail level, is essential for sustaining consumer trust and brand reputation.

Malaysia has been at the forefront of shaping the global halal ecosystem, pioneering the development of comprehensive halal standards. Among its key contributions is the MS2400 series, the world's first set of halal supply chain standards addressing transportation (MS2400-1), warehousing (MS2400-2), and retailing (MS2400-3) (Shariff & Ahmad, 2019). Of particular significance is MS2400-3:2019, which governs the retail interface where halal-certified products are directly accessible to consumers. This standard marks the final and most crucial checkpoint in the halal assurance process, where consumer perceptions and trust are ultimately affirmed or undermined.

This study aims to critically analyze MS2400-3:2019 within Malaysia's halal retail sector. The objectives are to evaluate the standard's structure and theoretical foundations, identify challenges hindering its adoption, compare it with international benchmarks from countries such as Indonesia, Brunei, UAE, Australia, and Japan, explore technological innovations for enhancing traceability and compliance, and propose actionable recommendations for improved implementation and certification uptake.

The findings of this study will have implications for both academia and industry. Academically, it enriches the literature on halal supply chain management by providing a critical analysis of MS2400-3:2019 and offering comparative insights into global best practices. For industry stakeholders, this study provides actionable recommendations for overcoming implementation barriers and optimizing compliance strategies, which can lead to enhanced operational clarity and improved consumer trust. Moreover, this study aligns with Malaysia's ambition to be a global hub for halal innovation by strengthening governance frameworks at the retail level, reinforcing its leadership in shaping international standards and expanding market access for certified products.

METHODOLOGY

A qualitative research approach underpins this study, enabling an in-depth analysis of MS2400-3:2019 within Malaysia's halal retail context. Such methods are appropriate for unpacking the nuances of governance systems, operational barriers, and the socio-economic impacts of halal certification.

Primary data sources include peer-reviewed journals, industry reports, official standards published by JAKIM, and documentation from halal certification organizations. These references help articulate both the conceptual framework and the on-the-ground implementation of MS2400-3:2019. A comparative benchmarking approach was used to evaluate Malaysia's standard against those from Indonesia, Brunei, the UAE, Australia, Japan, and Europe. Key evaluation areas included regulatory complexity, operational flexibility, technology adoption, consumer engagement, and market integration strategies.

Thematic content analysis helped distill key insights, identify major barriers, and derive strategic recommendations. This method facilitated the extraction of recurring patterns across a broad dataset, while triangulation ensured that the findings were validated through multiple data sources, enhancing both credibility and academic rigor.
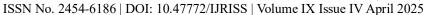
DISCUSSION

Over the last two decades, the concept of halal has undergone a profound transformation. Originally rooted in dietary laws—such as prescribed slaughter methods and the exclusion of alcohol or pork—halal has expanded into a broader system encompassing ethics, safety, and quality assurance (Febriati et al., 2024). This evolution has been largely driven by the increasing complexity of global supply chains and the greater mobility of Muslim consumers, both of which demand comprehensive assurance mechanisms to protect halal integrity across all stages.

Malaysia's introduction of the Halalan-Toyyiban Assurance Pipeline (HTAP) in 2010 marked a pivotal moment in this shift. HTAP blended the Islamic concepts of halal (permissible) and toyyiban (wholesome), placing strong emphasis on product purity and safety (Apandi et al., 2018). By 2019, this foundation matured into a more operationally-focused framework now referred to as the "halal supply chain," which prioritizes traceability, risk management, and shared accountability (MS2400-3:2019, 2019).

MS2400-3:2019 sets out general guidelines for halal retail operations, aiming to ensure product compliance right up to the point of sale. Despite its importance, industry-wide adoption remains limited. Concerns persist over whether the standard is practically scalable, sufficiently enforceable, or adequately aligned with commercial realities.

Halal Supply Chain Governance

A halal supply chain refers to a tightly integrated system designed to uphold halal integrity from origin to end-user. According to Muhamed et al. (2022), preserving halal status throughout every stage—whether supplier, manufacturer, logistics provider, or retailer—is critical. This framework is anchored by three key pillars: consumer expectations, product sensitivity, and contamination risk (Tieman et al., 2012).

As global trade and consumer mobility have grown, halal supply chains have had to evolve accordingly. What once focused solely on dietary compliance now embodies a complete ethical and quality-driven model (Febriati et al., 2024). With consumers expecting strict adherence to Islamic principles—products free of prohibited substances and ethically sourced—this evolution calls for sophisticated systems capable of maintaining halal assurance throughout the chain (Muhamed et al., 2022; Tieman et al., 2012).

Malaysia's HTAP initiative provided the early structure for such a model by merging the values of halal and toyyiban to promote both permissibility and wholesomeness (Apandi et al., 2018). This eventually led to the more detailed and operationally viable MS2400-3:2019, which integrates risk assessments, internal audits, policy enforcement, and employee training into retail operations. The standard is also aligned with established management systems such as ISO 9001, HACCP, and MS1900, allowing for seamless integration within existing quality assurance practices.

A notable feature of MS2400-3:2019 is its zone-based risk classification system, which divides retail spaces into green (low risk), yellow (moderate risk), and red (high risk) zones. For instance, red zones typically involve proximity to non-halal goods like alcohol or pork. To address contamination risks in such settings, the standard recommends physical segregation, dedicated utensils, and other preventive measures—ensuring halal status is maintained, even in mixed-product environments. This structured, risk-based approach is essential for identifying and controlling potential threats to halal integrity, although its success heavily depends on an organization's willingness and ability to invest in the necessary infrastructure—something not always feasible across Malaysia's diverse retail sector..
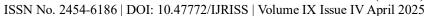
MS2400-3:2019 – Structure and Key Requirements

Positioned as a key advancement in Malaysia's Halal Supply Chain Management System, MS2400-3:2019 delivers a structured yet adaptable framework aimed at maintaining halal authenticity in retail—the final touchpoint before consumer interaction. As a component of the broader MS2400 series, this standard directly addresses the operational complexities faced by retailers, particularly those managing both halal and non-halal goods.

Its core strength lies in its adaptive risk management strategy, which classifies retail zones by contamination risk and applies targeted control measures accordingly. For large-format retailers—like supermarkets that carry items such as alcohol or pork—the standard mandates stricter measures: physical separation, specialized equipment, and traceability systems to prevent cross-contamination. However, incidents such as the KK Mart controversy (2023–2024) have shown that gaps in enforcement and staff training can severely undermine the standard's effectiveness, ultimately shaking consumer trust.

Conversely, the standard allows more streamlined compliance options for SMEs and small convenience stores. These include basic labeling practices and staff awareness initiatives. While this flexibility accounts for limited resources, critics argue it may dilute halal assurance—especially in fast-paced, high-turnover settings where space is tight and inventory rotates quickly. The absence of specific guidelines for store layout or logistics segregation leaves smaller operators to interpret the standard on their own, which can result in inconsistent application.

The standard's inclusion of e-commerce operations reflects an awareness of shifting retail dynamics. It outlines requirements for secure packaging, verified halal sourcing, and compliant logistics—essential in an era where digital commerce is on the rise. Still, ensuring halal integrity during last-mile delivery remains a concern that current provisions don't fully resolve.

Although MS2400-3:2019 is aligned with international halal benchmarks and reinforces Halalan-Toyyiban principles, its voluntary nature and lack of financial incentives pose real challenges to widespread adoption. Comparative studies indicate that in countries like Indonesia and the UAE, where halal standards are mandatory and supported by subsidies, compliance levels are notably higher. If Malaysia intends to maintain its global leadership in halal governance, updates to the standard—such as implementation toolkits for SMEs,

traceability technology requirements, and public-private funding mechanisms—could enhance its usability and relevance worldwide.

To assist retailers in applying the standard, MS2400-3:2019 also identifies key operational components and processes, summarized in Table 1.

Table 1: Core Components of MS2400-3:2019

No	Component	Explanation	Strategic Importance
1	Halal Policy Framework	A well-defined halal policy framework is the cornerstone of any successful halal retail operation. As highlighted in the document, this framework represents a documented and institutionally endorsed policy that reflects the organization's commitment to halal integrity. It is aligned with Shariah law and applicable regulatory requirements, and guides all related activities across the organization.	By formalizing this commitment, the framework provides a clear benchmark for internal audits and external stakeholder communication. It also reinforces organizational accountability, ensuring that halal values are integrated into every aspect of retail operations.
2	Supplier Evaluation and Monitoring	This involves a structured process for assessing and monitoring suppliers to ensure compliance with halal principles throughout the upstream supply chain.	Supplier audits, certification verification, and contractual clauses are key tools used to build a traceable and transparent supply chain.
3	Risk Control Measures	Risk control measures involve systems and protocols to identify, assess, mitigate, and monitor risks that could compromise halal integrity, particularly cross-contamination from haram (forbidden) or najis (unclean) materials.	Effective risk control measures prevent contamination and maintain product purity, which is essential for building and maintaining consumer trust and is integral for compliance with JAKIM audits.
4	Personnel Competency	Ensures that all staff, particularly those involved in handling, storage, and retail of halal products, are adequately trained on halal principles, standard operating procedures (SOPs), and regulatory requirements.	Key to operationalizing halal policies. Well-trained staff can enhance customer interactions by providing accurate information and addressing queries related to halal products.
5	Documentation and Traceability	Maintaining detailed records of all halal compliance activities, such as product movement logs, cleaning schedules, supplier documents, and internal audit findings.	Facilitates both internal and external audits, making it easier to demonstrate compliance and address any concerns raised by auditors and protect against reputational risks

Despite this comprehensive blueprint, the absence of detailed implementation guidelines has created challenges, particularly for small-to-medium enterprises (SMEs) seeking cost-effective compliance models.

Implementation Challenges

1) Operational constraints: One of the most pressing barriers to the adoption of MS2400-3:2019 lies in the operational complexity of applying halal segregation within mixed-product retail environments. Implementing effective separation protocols requires substantial logistical reconfiguration—dedicated zones, equipment, utensils, and supporting infrastructure. For smaller retailers, the financial burden of these changes can be daunting. Resources must be allocated for specialized shelving, separate carts and storage units, distinct distribution channels, and comprehensive traceability systems to monitor product handling. As Kadir et al.

(2016) point out, such technical and financial requirements often exceed the capacity of small-to-medium enterprises (SMEs), leaving many unable to fully comply with the standard.

Malaysia's cosmetic industry offers a vivid illustration of this challenge. To meet halal-related standards, businesses must separate halal and non-halal items at every stage of the supply chain. However, many SMEs in this sector lack the infrastructure and trained personnel needed to execute such segregation effectively (Giyanti et al., 2020). This reality highlights the urgent need for targeted support—whether financial aid or technical assistance—to bridge these capability gaps and promote wider compliance.

The KK Mart incident of 2023–2024 further underscores the risks of inadequate segregation. The retailer faced intense backlash after halal-labeled products were found near non-halal goods, sparking consumer concerns about contamination and trust. The fallout damaged the brand's credibility and revealed the practical difficulties of enforcing segregation in busy, diverse retail settings (The Star Online, 2024). This controversy emphasized the need for clearer operational guidelines tailored to various retail formats, along with infrastructural support to ensure that compliance with MS2400-3:2019 is both achievable and sustainable.

Collectively, these operational challenges point to deeper systemic issues in Malaysia's halal retail ecosystem. Without structured implementation guides and accessible funding mechanisms, many SMEs remain unable to meet certification requirements. Addressing this will require a concerted effort from policymakers, industry players, and halal authorities to develop practical solutions that allow retailers to uphold halal integrity without sacrificing economic viability.

2) Human capital and resource gaps: Halal compliance depends heavily on human expertise, individuals who understand both Islamic principles and quality assurance standards. Yet, Malaysia's retail sector continues to struggle with a shortage of qualified personnel. Many businesses report difficulties in hiring or training staff with the necessary knowledge to manage halal-related operations (Voak & Fairman, 2020). This shortfall not only hampers the effective rollout of MS2400-3:2019 but also erodes consumer confidence when frontline staff are unable to address halal-specific inquiries competently.

In response, the Halal Development Corporation (HDC) has proposed the establishment of dedicated roles such as "halal compliance managers" to strengthen internal governance structures. Still, despite the existence of more than 200,000 local businesses engaged in halal commerce, only 9,162 are officially certified (Malaysia Continues to Lead Global Islamic Economy, 2021). This stark gap underscores both the depth of the human capital issue and the broader limitations of Malaysia's voluntary certification approach.

To close this gap, a long-term investment in vocational education is needed—standardized training programs, strategic partnerships between academia and industry, and hands-on certification workshops can collectively build a workforce capable of meeting evolving halal requirements in retail settings.

3) Certification uptake and ROI ambiguity: Since its launch, MS2400-3:2019 has seen limited adoption, with many retailers hesitant to pursue certification due to uncertainties around its return on investment (ROI). As of April 2025, not a single retail business in Selangor had obtained certification under this framework (Halal Status Verification, 2025). This lack of uptake signals a perceived mismatch between the cost of compliance—including infrastructure modifications, staff training, and certification fees—and the tangible benefits it offers, such as increased customer loyalty or revenue growth (Han et al., 2022).

Another contributing factor is the inconsistent level of consumer awareness. While demand for halal-certified products is growing globally, local market segments exhibit varying levels of understanding and trust in certification schemes. In some cases, consumer skepticism—fueled by perceived enforcement lapses and a lack of transparency—diminishes the perceived value of certification (Damit et al., 2017). This dynamic weakens the commercial justification for retailers, who may question whether certification efforts truly translate into competitive advantage.

To counter these issues, coordinated efforts are needed across multiple fronts. Educating consumers on the meaning and value of halal certification, improving enforcement transparency, and offering clearer incentives

can help build both consumer confidence and business interest. Such initiatives would go a long way toward boosting certification uptake and demonstrating the long-term value of halal compliance.

Comparative Perspectives and Global Benchmarks

The global halal industry operates across diverse cultural, regulatory, and operational environments, which has led to the development of distinct certification models around the world. While Malaysia stands out for its structured and comprehensive approach to halal standardization, many other countries—both Muslim-majority and non-Muslim—have customized their systems to suit local needs. A comparative review of MS2400-3:2019 against these international benchmarks offers valuable perspectives on enhancing the standard, improving global alignment, and advancing harmonization efforts.

Malaysia's MS2400 series, administered by JAKIM, is widely recognized as one of the most holistic halal governance systems. Covering transportation (MS2400-1), warehousing (MS2400-2), and retail (MS2400-3), the framework aims to uphold halal integrity throughout the entire supply chain. MS2400-3:2019, in particular, focuses on ensuring compliance at the critical retail stage—where consumers interact directly with products. However, its voluntary status, general guidelines, and limited technological integration have posed challenges to widespread uptake. Notably, the lack of detailed implementation tools has left many small-to-medium enterprises (SMEs) uncertain about how to operationalize the standard effectively (Sharon, 2024). These gaps, coupled with ongoing concerns around return on investment (ROI), continue to deter retailers from pursuing certification.
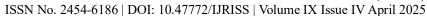
Indonesia presents a contrasting model through its BPJPH system, which benefits from strong legal backing and utilizes objective, data-centric evaluation methods. While this has strengthened domestic adoption, the system faces hurdles in addressing complex logistics and gaining recognition beyond ASEAN borders (Rahma & Phahlevy, 2024). In Brunei, halal certification is managed by the Halal Food Control Division, which emphasizes theological depth and traceability. However, scalability remains an issue, particularly for adapting the framework to evolving retail formats (Ibrahim, 2022).

In the Gulf region, countries like the UAE and Saudi Arabia have developed internationally respected halal systems through organizations such as ESMA and SFDA. Their standards enjoy global credibility, but the certification process is often encumbered by bureaucratic procedures and challenges in establishing mutual recognition agreements with foreign bodies (Othman & Ibrahim, 2025).

Non-Muslim-majority countries have also created distinct certification frameworks. Australia's system, for instance, relies on independent certifiers such as AFIC, known for clear operational procedures and strong export credibility. Nevertheless, the decentralized nature of certifiers and the lack of a unified Shariah oversight body present challenges for consistency (Persyarikatan Muhammadiyah, 2025). In Japan and South Korea, halal certification is largely shaped by tourism and retail experience design, with a strong emphasis on consumer-facing aesthetics. However, both nations depend heavily on foreign certifiers due to limited theological infrastructure (Abdur Rakib et al., 2020). Europe, meanwhile, offers a pluralistic system where halal standards are tailored to local market values. Despite this adaptability, inconsistent certification protocols across countries have created fragmentation (Tajuddin et al., 2022).

This cross-regional analysis highlights both the strengths and limitations of Malaysia's approach. While MS2400-3:2019 stands out for its supply chain-wide coverage and conceptual depth, its voluntary adoption model, ambiguous implementation framework, and limited use of digital tools continue to hinder broader acceptance—particularly within the retail sector (Sharon, 2024).

Nonetheless, Malaysia holds a distinct strategic advantage: its capacity to integrate MS2400-3:2019 into global frameworks like SMIIC and OIC-SMIIC. Progress toward mutual recognition agreements with influential markets such as Saudi Arabia and the UAE would significantly elevate the international legitimacy of Malaysian halal certification. Such initiatives could not only improve domestic compliance and confidence but also strengthen Malaysia's role as a global leader in halal retail governance.

Business Implications and Strategic Integration

MS2400-3:2019 offers businesses more than a pathway to religious compliance—it serves as a strategic tool for improving competitiveness, operational efficiency, and consumer trust. When adopted thoughtfully, the standard can unlock access to expanding halal markets, strengthen brand identity, and contribute to long-term, sustainable growth. Its implementation allows businesses to distinguish themselves in an increasingly competitive and values-driven global halal economy.

Across high-demand regions such as Southeast Asia, the Middle East, and parts of Europe, halal certification has evolved into a powerful market differentiator. It functions not only as a regulatory requirement but also as a symbol of reliability and ethical integrity—attributes that resonate deeply with modern consumers. Retailers adopting MS2400-3:2019 can demonstrate their commitment to religious compliance, ethical sourcing, and transparent supply chains—core principles that align with consumer expectations (Othman & Ibrahim, 2025). In diverse, multicultural markets, these attributes also overlap with universal concerns around hygiene, food safety, and sustainability, further enhancing brand loyalty and market appeal.

A key strength of MS2400-3:2019 lies in its compatibility with internationally recognized standards such as ISO 9001 and ISO 22000. This alignment allows halal practices to be incorporated into existing quality and safety protocols, minimizing duplication while enhancing organizational coherence. Businesses can embed halal-specific controls into ongoing processes like documentation, internal audits, and inspections, thus streamlining compliance efforts.

As consumer expectations shift toward greater transparency, digital innovations are transforming how businesses uphold halal integrity. Technologies like blockchain, RFID, and the Internet of Things (IoT) are being employed to deliver real-time traceability and verification throughout the supply chain. Blockchain, for instance, provides immutable records of product handling, bolstering audit reliability and consumer confidence (Nik et al., 2020). RFID tags enable continuous tracking in mixed-product environments, while IoT sensors help monitor critical environmental factors—especially vital for halal-sensitive goods like meat and dairy.

Beyond backend operations, these technologies also enhance the consumer experience. Mobile apps for halal verification, QR-enabled packaging, and interactive dashboards now empower consumers to validate a product's halal status instantly, from origin to point-of-sale. This heightened transparency not only reinforces trust but also positions the brand as forward-thinking and accountable in a market where authenticity is paramount.

Despite its benefits, integrating MS2400-3:2019 as a strategic asset requires coordinated commitment across the supply chain. By leveraging its compatibility with global standards and embracing cutting-edge technologies, businesses can move beyond compliance toward competitive advantage. As global demand for halal-certified products continues to surge, MS2400-3:2019 offers a timely and scalable framework to align with evolving consumer values while propelling growth within the halal economy.

CONCLUSION

The MS2400-3:2019 Halal Supply Chain Management System – Part 3: Retailing – General Requirements represents a major milestone in Malaysia's commitment to formalizing end-to-end halal governance. By addressing the retail sector—where halal-certified products meet consumers—it fills a critical gap in the halal assurance framework. The standard's integration of Shariah principles with modern management system methodologies creates a versatile yet reliable foundation for balancing religious compliance with operational functionality.

However, despite its thoughtful design, uptake of MS2400-3:2019 has been limited. Practical challenges such as funding constraints, infrastructural inadequacies, skills shortages, and uncertainty around return on investment (ROI) continue to hinder widespread adoption. While its flexibility is intended to accommodate varied retail contexts, the lack of detailed, prescriptive guidance has often left SMEs struggling to implement

the standard effectively. These issues underscore the importance of strategic support to unlock the standard's full value.

Nonetheless, the long-term promise of MS2400-3:2019 remains considerable. As the global halal market expands—driven by demographic changes, deeper religious consciousness, and evolving consumer values—the standard offers a timely and scalable solution for reinforcing halal integrity at the retail level. With the right policy alignment, stakeholder collaboration, and operational clarity, MS2400-3:2019 has the potential to set a new international benchmark for halal retail certification, reaffirming Malaysia's leadership in this domain.

Suggestions for Stakeholders

To realize the full potential of MS2400-3:2019, coordinated actions are needed at both the systemic and operational levels. One priority is the development of detailed implementation guides tailored to various retail formats. These guides should include visual schematics, procedural checklists, and real-world examples to help businesses translate the standard into actionable steps within daily operations.

Government-led incentives can also play a transformative role. Financial support mechanisms—such as certification subsidies, tax incentives, and onboarding assistance—can ease the burden on SMEs, making adoption more feasible. Aligning public procurement criteria with MS2400-3 compliance, particularly in halal tenders, would also signal policy-level commitment and offer tangible commercial rewards for certified retailers.

On the human capital front, modular training programs should be created through partnerships among JAKIM, academic institutions, and halal advocacy groups. These programs would build essential skills in halal risk management, customer engagement, and documentation protocols. Public awareness campaigns should also be expanded to educate consumers about the significance of MS2400-3 certification. Informed consumers can drive demand for certified environments, creating market-driven pressure for broader adoption.

Future Research Directions

Ongoing research is essential to refine MS2400-3:2019 and expand its relevance across different retail contexts. Economic studies—such as cost-benefit analyses and ROI evaluations—should be prioritized to provide clarity for businesses weighing the investment. Comparative studies between certified and uncertified retailers can help quantify the financial and reputational benefits of compliance.

Technological innovation offers another important research frontier. Exploring the application of blockchain, artificial intelligence (AI), and Internet of Things (IoT) solutions can lead to scalable tools for real-time tracking, risk prediction, and automated certification. These advancements could significantly enhance transparency, auditability, and consumer trust in halal retail environments.

As Malaysia's halal standards expand into non-Muslim-majority markets, understanding how to localize MS2400-3 will be increasingly important. Cross-cultural studies examining regional differences—in regulation, consumer behavior, and religious interpretation—can inform context-specific implementation strategies for markets like Europe, East Asia, and North America.

Finally, theological and legal harmonization remains a pressing global concern. Given the diversity of Islamic jurisprudential views, research exploring how MS2400-3 aligns with various fatwas and legal schools could help reduce friction in international halal trade and encourage global standardization efforts.

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