



MALAYSIAN STANDARD

MS 1500:2004

HALAL FOOD – PRODUCTION, PREPARATION, HANDLING AND STORAGE – GENERAL GUIDELINES (FIRST REVISION)

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CONTENTS

	Page
Committee representation	ii
Foreword.....	iii
1 Scope.....	1
2 Normative references.....	1
3 Definitions	1
4 Requirements.....	3
5 Compliance	10
6 <i>Halal</i> certificates	10
7 <i>Halal</i> certification mark.....	10
Figures	
1 Slaughtering part for chicken.....	6
2 Method of slaughtering chicken	6
3 Slaughtering part for cattle.....	7
4 Method of slaughtering cattle	7
Table A1 Guideline parameters for electrical stunning	12
Annexes	
A Requirements on the use of stunning in slaughter of ruminant and poultry.....	11
B Guidelines on mechanical slaughter of poultry.....	13
C Method of washing and ritual cleansing (<i>dibagh</i>) according to <i>Shariah</i> law for <i>najs al-mughallazah</i>	14

MS 1500:2004

Committee representation

The *Halal* Standards Industry Standards Committee (ISC I) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations:

Department of Islamic Development Malaysia
Department of Standards Malaysia
Department of Veterinary Services
Federation of Malaysian Consumers' Association
Federation of Malaysian Manufacturers
Food Quality Control Division, Ministry of Health
Institute of Islamic Understanding Malaysia
Institute of Quality Malaysia
Malaysian Agricultural Research and Development Institute
Ministry of Domestic Trade and Consumer Affairs
Ministry of International Trade and Industry
Muslim Consumers' Association of Malaysia
National Pharmaceutical Control Bureau, Ministry of Health

The Technical Committee on *Halal* Food which developed this Malaysian Standard consists of the representatives from the following organisations:

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Department of Islamic Development Malaysia
Department of Veterinary Services
Federal Agricultural Marketing Authority
Federation of Malaysian Manufacturers
Food Quality Control Division, Ministry of Health
Institute of Islamic Understanding Malaysia
Malaysian Agricultural Research and Development Institute
Ministry of Agriculture and Agro-based Industry
Ministry of Domestic Trade and Consumer Affairs
Ministry of International Trade and Industry
Muslim Consumers' Association of Malaysia
Royal Customs of Malaysia
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SIRIM QAS International Sdn Bhd (Certification Section)
SIRIM QAS International Sdn Bhd (Chemical Testing Section)
Universiti Kebangsaan Malaysia
Universiti Putra Malaysia
Universiti Teknologi MARA

FOREWORD

This Malaysian Standard was developed by the Technical Committee on *Halal* Food under the authority of the *Halal* Standards Industry Standards Committee.

This Malaysian Standard is the first revision of MS 1500:2000, *General guidelines on the production, preparation, handling and storage of halal food*.

Major modifications in this revision are as follows:

- a) modification of the title of this standard to *Halal Food - Production, Preparation, Handling and Storage - General Guidelines* ;
- b) incorporation of three types of *najs* in 3.4.2;
- c) amendment to 4.2 on slaughtering requirements, which includes incorporation of figures of slaughtering parts and methods of slaughtering;
- d) amendment to 4.5 on hygiene and sanitation and addition of requirements on food safety;
- e) deletion of two types of stunning, i.e. mechanical and pneumatic stunning in Annex A; and
- f) incorporation of washing method and ritual cleansing (*dibagh*) according to Shariah law in Annex C.

This revised Malaysian Standard cancels and replaces MS 1500:2000

Compliance with a Malaysian Standard does not of itself confer immunity from legal obligations.

**HALAL FOOD –
PRODUCTION, PREPARATION, HANDLING AND STORAGE –
GENERAL GUIDELINES
(FIRST REVISION)**

1. Scope

This Malaysian Standard prescribes practical guidelines for the food industry on the preparation and handling of *halal* food (including nutrient supplements) and to serve as a basic requirement for food product and food trade or business in Malaysia. This standard should be used together with MS 1480 and MS 1514.

NOTE. This standard does not contain all requirements which may be required for certification. *Halal* certification may be sought by arrangement with the competent Islamic authorities in Malaysia.

2. Normative references

The following normative references are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the normative references (including any amendments) applies.

MS 1480, *Food safety according to hazard analysis and critical control point (HACCP) system*

MS 1514, *General principles of food hygiene*

Guidelines on good hygiene practices for small and medium scale food industries towards HACCP MOH/K/MAK/18.03(GU), Food Quality Control Division, Department of Public Health, Ministry of Health, Malaysia

3. Definitions

For the purposes of this standard, the following definitions apply.

3.1 Shariah law

Shariah law means the laws of Islam in the *Mazhab* of Shafie or the laws of Islam in any of the other *Mazhabs* of Maliki, Hambali and Hanafi which are approved by the Yang di-Pertuan Agong to be in force in the Federal Territory or the Ruler of any State to be in force in the state or *fatwa* approved by the Islamic Authority.

3.2 Halal

Things or actions permitted by *Shariah* law without punishment imposed on the doer.

MS 1500:2004

3.3 Halal food

Halal food means food permitted under the *Shariah* law and fulfills the following conditions:

- a) the food or its ingredients that do not contain any parts or products of animals that are non-*halal* to Muslims by *Shariah* law or products of animals which are not slaughtered according to *Shariah* law;
- b) the food does not contain any ingredients that are *najs* according to *Shariah* law;
- c) the food that is safe and not harmful;
- d) the food that is not prepared, processed or manufactured using equipment that is contaminated with things that are *najs* according to *Shariah* law;
- e) the food or its ingredients do not contain any human parts or its derivatives that are not permitted by *Shariah* law; and
- f) during its preparation, processing, packaging, storage or transportation, the food is physically separated from any other food that does not meet the requirements stated in items a), b), c), d) or e) or any other things that have been decreed as *najs* by *Shariah* law.

3.4 Najs

3.4.1 *Najs* according to *Shariah* law are:

- a) things that are themselves not permissible such as pig (*khinzir*) and all its derivatives, blood and carrion;
- b) *halal* food that is contaminated with things that are non-*halal*;
- c) *halal* food that comes into direct contact with things that are non-*halal*;
- d) any liquid and objects discharged from the orifices of human beings or animals such as urine, excrement, blood, vomit, pus, sperm and ova of pigs and dogs except sperm and ova of other animals; and
- e) carrion or *halal* animals that are not slaughtered according to *Shariah* law.

3.4.2 There are three types of *najs*:

- a) *Mughallazah* which is considered as severe *najs* which are dogs and pigs (*khinzir*) including any liquid and objects discharged from their orifices, descendants and derivatives;
- b) *Mukhaffafah* which is considered as light *najs*. The only *najs* in this category is urine from a baby boy at the age of 2 years and below who has not consumed any other food except his mother's milk; and

- c) *Mutawassitah* which is considered as medium *najs* which does not falls under severe or light *najs* such as vomit, pus, blood, alcoholic drinks (*khamar*), carrion, liquid and objects discharged from the orifices, etc.

3.5 Slaughtering

According to *Shariah* law the slaughter act shall sever the trachea (*halqum*), oesophagus (*mari'*) and both the carotid arteries and jugular veins (*wadajain*) to hasten the bleeding and death of the animal.

3.6 Competent authority

Competent authority shall be the agency which is entrusted by the government to carry out specified work according to prescribed requirements.

NOTE. In Malaysia there are various competent authorities which are responsible in respective areas such as Islamic affairs, animal health, public health, food safety, and etc.

3.7 Islamic authority

Islamic authority shall be the government agency which is responsible for Islamic affairs in Malaysia.

4. Requirements

4.1 Sources of *halal* food and drinks

4.1.1 Animals

Animals can be divided into two categories:

4.1.1.1 Land animals

All land animals are *halal* as food except the following:

- a) animals that are not slaughtered according to *Shariah* law;
- b) pigs (*khinzir*) and dogs and their descendants;
- c) animals with long pointed teeth or tusks which are used to kill prey such as tigers, bears, elephants, cats, monkeys, etc.;
- d) birds with talons or predator birds;
- e) pests such as rats, centipedes, scorpions and other similar animals;
- f) animals that are forbidden to be killed in Islam such as bees (*al-nahlah*), woodpeckers (*hud-hud*), etc.; and
- g) creatures that are considered repulsive such as lice, flies, etc.

MS 1500:2004

4.1.1.2 Aquatic animals

Aquatic animals are those which live in water and cannot survive outside it, such as fish. All aquatic animals are *halal* except those that are poisonous, intoxicating or hazardous to health. Animals that live both on land and water such as crocodiles, turtles and frogs are not *halal*.

4.1.2 Plants

All types of plants and plant products and their derivatives are *halal* except those that are poisonous, intoxicating or hazardous to health.

4.1.3 Mushroom and micro-organisms

All types of mushroom and micro-organisms (i.e. bacteria, algae and fungi) and their by-products and/or derivatives are *halal* except those that are poisonous, intoxicating or hazardous to health.

4.1.4 Natural minerals and chemicals

All natural minerals and chemicals are *halal* except those that are poisonous, intoxicating or hazardous to health.

4.1.5 Drinks

All kinds of water and beverages are *halal* as drinks except those that are poisonous, intoxicating or hazardous to health.

4.1.6 Genetically Modified Food (GMF)

Food and drinks containing products and/or by-products of Genetically Modified Organisms (GMOs) or ingredients made by the use of genetic material of animals that are non-*halal* by *Shariah* law are not *halal*.

4.1.7 Notwithstanding 4.1.1.2 and 4.1.2 the products from hazardous aquatic animals or plants are *halal* when the toxin or poison has been eliminated during processing, as permitted by *Shariah* law.

4.2 Slaughtering

4.2.1 The *halal* slaughter shall be physically separated from non-*halal* slaughter according to the following requirements:

- a) slaughtering shall be performed only by a Muslim who is mentally sound, fully understands the fundamental rules and conditions related to the slaughter of animals in Islam and he shall not be in *ihram*;

NOTE. *Ihram* is a compulsory act (*ruk'n*) performed during *haj* and *umrah*.

- b) the act of slaughtering shall be done with *niyyah* (intention) and the slaughterman is well aware of his action;
- c) the purpose of slaughtering is only for Allah and not for other purposes;

- d) the animal to be slaughtered has to be an animal that is *halal*;
- e) the animal to be slaughtered shall be alive or deemed to be alive (*hayat al-mustaqirrah*) at the time of slaughter;
- f) animals to be slaughtered shall be healthy and have been approved by the competent authority;
- g) the phrase بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ (In the name of Allah, Most Gracious, Most Merciful) has to be invoked immediately before slaughtering;
- h) slaughtering lines, tools and utensils shall be dedicated for *halal* slaughter only;
- i) slaughtering knife or blade shall be sharp;
- j) slaughtering shall be done only once. The "sawing action" of the slaughtering is permitted as long as the slaughtering knife or blade is not lifted off the animal during the slaughtering;
- k) bones, nails and teeth shall not be used as slaughtering tools;
- l) the act of *halal* slaughter shall begin with an incision on the neck at some point just below the glottis (Adam's apple) and after the glottis for long necked animals;
- m) the slaughter act shall sever the trachea (*halqum*), oesophagus (*mari'*) and both the carotid arteries and jugular veins (*wadajain*) to hasten the bleeding and death of the animal (see Figure 1 to Figure 4). The bleeding shall be spontaneous and complete; and
- n) a trained Muslim inspector shall be appointed and be responsible to check that the animals are properly slaughtered according to the *Shariah* law.

4.2.2 For poultry, scalding shall only be carried out on animals that are deemed dead as a result of *halal* slaughter.

4.2.3 Stunning is not recommended. However if stunning is to be carried out the conditions specified in Annex A shall be complied.

4.2.4 Slaughter of poultry by mechanical knife shall be in accordance to the requirements specified in Annex B.

4.3 Product processing, handling and distribution

4.3.1 All processed food is *halal* if it meets the following requirements:

- a) the product or its ingredients do not contain any components or products of animals that are non-*halal* by *Shariah* law or products of animals that are not slaughtered according to *Shariah* law;
- b) the product does not contain anything in any quantity that is decreed as *najs* by *Shariah* law;
- c) the product or its ingredients are safe and not harmful;

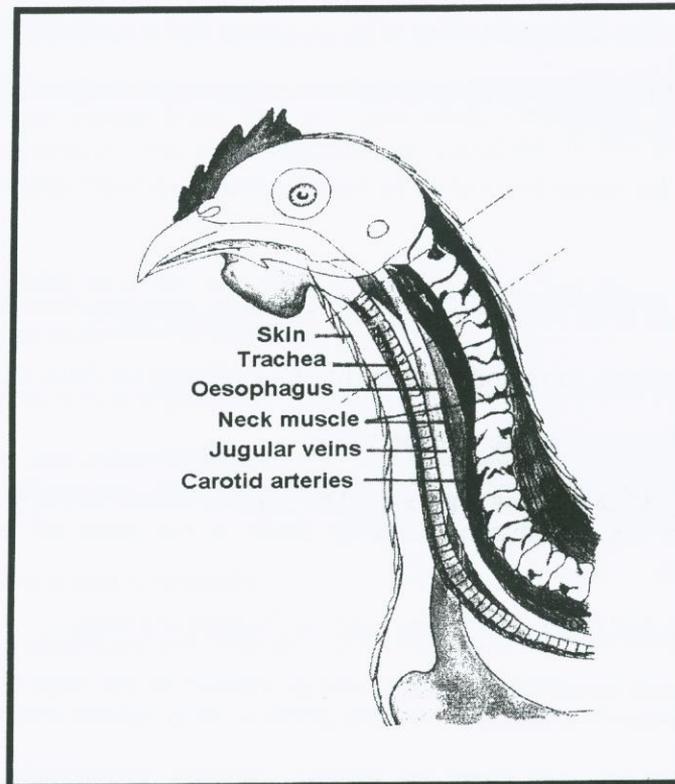


Figure 1. Slaughtering part for chicken

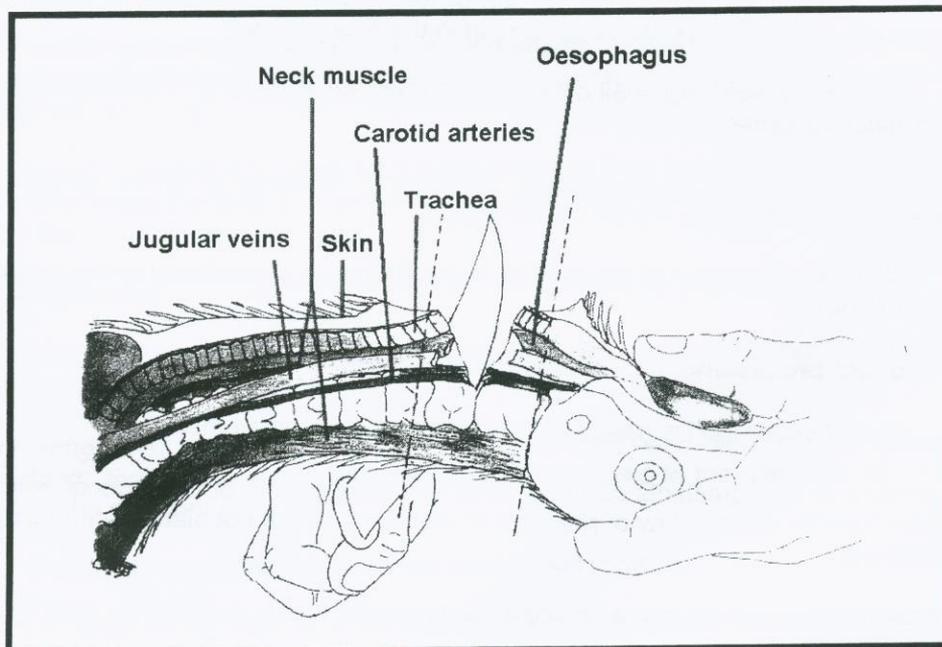


Figure 2. Method of slaughtering chicken

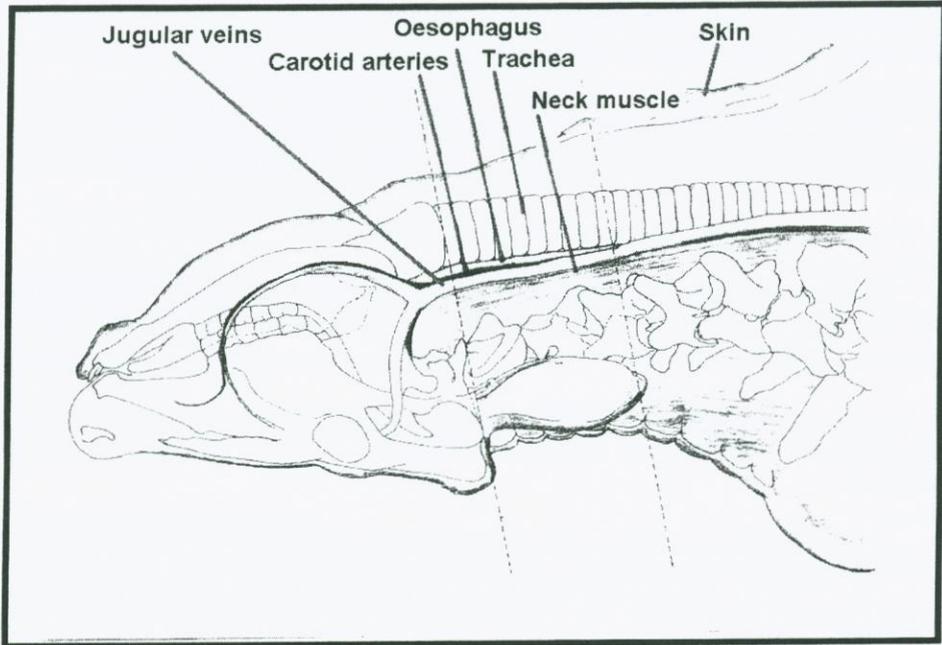


Figure 3. Slaughtering part for cattle

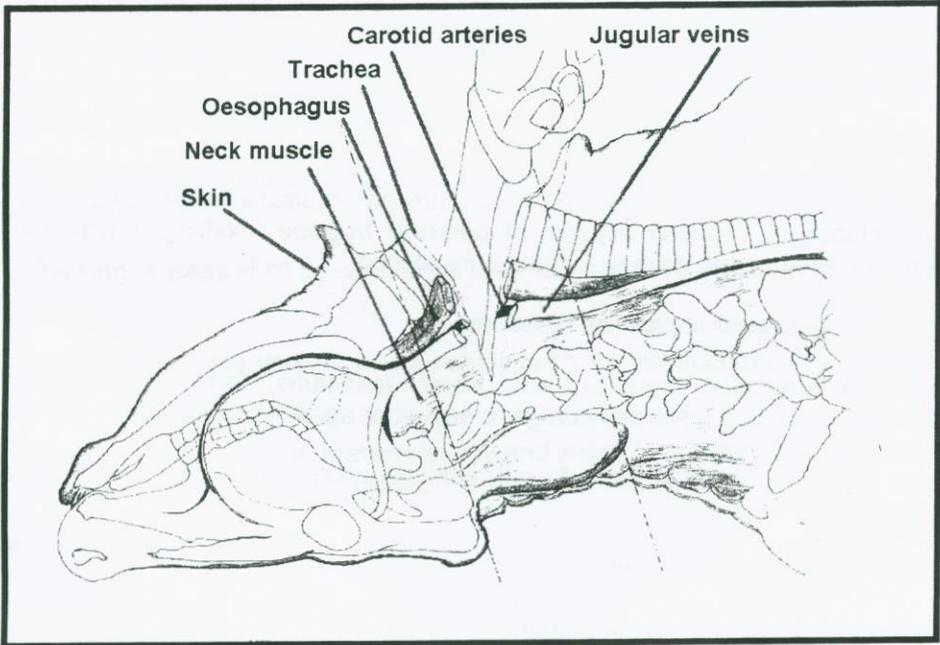


Figure 4. Method of slaughtering cattle

MS 1500:2004

- d) the product is prepared, processed or manufactured using equipment and facilities that are free from contamination with *najs*; and
- e) during its preparation, processing, packaging, storage or transportation, it shall be physically separated from any other food that does not meet the requirements specified in items a), b), c) and/or d) or any other things that are decreed as *najs* by *Shariah* law.

4.3.2 Devices, utensils, machines and processing aids

4.3.2.1 Devices, utensils, machines and processing aids used for processing *halal* food shall not be made of or contain any materials that are decreed as *najs* by *Shariah* law and shall be used only for *halal* food.

4.3.2.2 Devices, utensils and machines which were previously used or in contact with *najs al-mughallazah* shall be washed and ritually cleansed (*dibagh*) as required by *Shariah* law (see Annex C).

4.3.2.3 In the case of converting *najs al-mughallazah* line or processing line containing *najs al-mughallazah* into *halal* production line, the line shall be washed and ritually cleansed (*dibagh*) as required by *Shariah* law (see Annex C). This procedure shall be supervised and verified by the competent Islamic Authority. Upon conversion, the line shall be operated for *halal* food only. Repetition in converting the line to *najs al-mughallazah* line and back to *halal* line, shall not be permitted.

4.4 Product storage, display and servings

All *halal* food that are stored, displayed, sold or served shall be categorised and labelled *halal* and segregated at every stage so as to prevent them from being mixed or contaminated with things that are non-*halal*.

4.5 Hygiene, sanitation and food safety

4.5.1 Hygiene, sanitation and food safety are prerequisites in the preparation of *halal* food. It includes the various aspects of personal hygiene, clothing, equipment and the working premises for processing or manufacture of food.

4.5.2 Producers shall implement measures to:

- a) control contamination from air, soil, water, feedstuffs, fertilizers (including natural fertilizers), pesticides, veterinary drugs or any other agent used in primary production;
- b) protect food sources from pest, faecal, contamination from micro-organisms and other contamination;
- c) manage waste effectively; and
- d) store harmful substances appropriately.

4.5.3 *Halal* food shall be processed, packed and distributed under strict hygienic condition in premises licensed in accordance with good manufacturing practices (GMP) or good hygiene practices (GHP) as specified in the *Guidelines on good hygiene practices for small and medium scale food industries towards HACCP* and public health legislation currently enforced by the competent authority in Malaysia.

4.5.4 Systems should be in place to prevent;

- a) contamination of foods by foreign matters such as plastic, glass or metal shards from machinery, dust, harmful gas or fumes and unwanted chemicals; and
- b) excessive used of permitted food additives.

In manufacturing and processing, suitable detection or screening devices should be used where necessary.

4.6 Packaging and labelling

4.6.1 *Halal* food shall be suitably packed. Packaging materials shall be *halal* in nature and shall fulfill the following requirements:

- a) the packaging materials shall not be made from any raw materials that are decreed as *najs* by *Shariah* law;
- b) it is not prepared, processed or manufactured using equipment that is contaminated with things that are *najs* as decreed by *Shariah* law;
- c) during its preparation, processing, storage or transportation, it shall be physically separated from any other food that does not meet the requirements stated in item a) or b) or any other things that have been decreed as *najs* by *Shariah* law; and
- d) the packaging material does not contain any raw materials that are considered hazardous to human health.

4.6.2 Packing process shall be carried out in a clean and hygienic manner and in sound sanitary conditions.

4.6.3 Labelling material used in direct contact with the product shall be non-hazardous and *halal*.

4.6.4 Each container shall be marked legibly and indelibly or a label shall be attached to the container, with the following information:

- a) name of the product;
- b) nett content expressed in metric system (SI units);
- c) name and address of the manufacturer, importer and/or distributor and trademark;
- d) list of ingredients;

MS 1500:2004

- e) code number identifying date and/or batch number of manufacture and expiry date; and
- f) country of origin.

4.6.5 For primary meat products, in addition to requirements specified in 4.6.4, the label or mark shall also include the following information:

- a) date of slaughter; and
- b) date of processing.

4.7 Legal requirements

The product shall in other aspects comply with legislation including other relevant requirements currently in force in Malaysia.

5. Compliance

For product deemed to comply with this standard, it shall comply with Clause 4 of this standard. This shall be verified through site inspection as deemed necessary by the competent authority.

6. Halal certificates

The *halal* certificates shall be issued by the relevant Islamic Authorities in Malaysia.

7. Halal certification mark

Each product, upon approval by the Federal Islamic Authority, may be marked with the *halal* certification mark of that authority provided the product conforms to the requirements of this standard.

Annex A
(normative)

Requirements on the use of stunning in slaughter of ruminant and poultry

A1. General requirements

A1.1 Slaughtering shall be carried out according to the requirements related to the slaughter of animals in Islam.

A1.2 The animal shall be alive or deemed to be alive (*hayat al-mustaqirrah*) at the time of slaughter.

A1.3 The use of stunning equipment shall be under the supervision of a trained Muslim and periodically monitored by competent Islamic Authority or *Halal* Certification Authority.

A1.4 The stunning shall not kill or cause permanent physical injury to the animal.

A1.5 Gadgets which are used to stun the animals under *mughallazah najis* category shall not be used to stun animals for *halal* slaughter.

A1.6 Type of stunning that is recommended is electrical stunning or any other stunning that is permitted by *Majlis Fatwa*.

A2. Electrical stunning

A2.1 The electrical stunner shall be of the type allowed by the competent authority in charge of slaughter.

A2.2 The type of stunner used for slaughter of *halal* animals shall be 'head only stunner' type, where both electrodes are placed on the head region.

A2.3 Electrical stunning of poultry is allowed using 'water bath stunner' only.

A2.4 The strength of current used shall be supervised by a trained Muslim and monitored by competent Islamic Authority or *Halal* Certification Authority. The guidelines on stunning parameters are as specified in Table A1.

Table A1. Guideline parameters for electrical stunning

Type of stock	Current (A)	Duration (s)
Chicken	0.25 - 0.50	3.00 - 5.00
Lamb	0.50 - 0.90	2.00 - 3.00
Goat	0.70 - 1.00	2.00 - 3.00
Sheep	0.70 - 1.20	2.00 - 3.00
Calf	0.50 - 1.50	3.00
Steer	1.50 - 2.50	2.00 - 3.00
Cow	2.00 - 3.00	2.50 - 3.50
Bull	2.50 - 3.50	3.00 - 4.00
Buffalo	2.50 - 3.50	3.00 - 4.00
Ostrich	0.75	10.00

Annex B
(normative)

Guidelines on mechanical slaughter of poultry

Mechanical slaughter of poultry is permitted and the following requirements shall be complied.

- a) The operator of the mechanical knife (slaughterman) shall be a Muslim.
- b) The slaughterman shall recite *بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ* (In the name of Allah, Most Gracious, Most Merciful) prior to switching on the mechanical knife machine and shall not leave the slaughter area.
- c) Should the slaughterman leave the slaughter area, he shall stop the machine line and switch off the mechanical knife. To restart the operation he or another Muslim slaughterman shall recite *بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ* (In the name of Allah, Most Gracious, Most Merciful) before switching on the line and mechanical knife.
- d) The knife used shall be of single blade type and shall be sharp.
- e) The slaughter act shall sever the trachea (*halqum*), oesophagus (*mari'*) and both the carotid arteries and jugular veins (*wadajain*) to hasten the bleeding and death of the animal.
- f) The slaughterman is required to check that each poultry is properly slaughtered. He or other Muslim slaughterman shall slaughter manually any birds that missed the mechanical knife.

Annex C
(normative)

**Method of washing and ritual cleansing (*dibagh*) according to
Shariah law for *najs al-mughallazah***

C1. General requirements

The *najs*, whether visible (*'ainiah*) or invisible (disappeared or dried up etc.) is named *hukmiah*. To cleanse *najs*:

- a) it is required to wash seven times, one of which shall be water mixed with soil;
- b) the first wash shall be to clear the existence of *najs*, even if a few washes are needed. The water from first cleaning shall not remain behind and the next wash shall be counted as the second wash; and
- c) the amount of soil used is just enough to make a suspension.

C2. Conditions of the soil

The conditions of the soil are:

- a) free from *najs*;
- b) free from other impurities like oil; and
- c) not *musta'mal* soil [which had been used for dry ablution (*tayammum*)] except after subject to heavy rain.

C3. Conditions of the water

The conditions of the water are:

- a) shall be natural (*mutlaq*);
- b) not *musta'mal*; and

NOTE. *Musta'mal* water is the water that is less than 2 *qillah* (approximately 270 l) that had been used for cleansing.

- c) free from *najs*.

Acknowledgements

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