EU ASIA COOPERATION
on (PHYTO-) SANITARY (SPS) and
FOOD SAFETY REGULATION

ASSESSMENT OF INDIA'S HEALTH CERTIFICATE REQUIREMENTS

For pork products imports

This publication was produced with the financial support of the European Union. It reflects an analysis undertaken by AETS which remains without prejudice to the interpretation or enforcement of applicable legislation of India by the competent authorities.

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MAIN ABBREVIATIONS

FSSAI	Food Safety and Standards Authority of India
FICS	Food Import Clearance System, the FSSAI online application system for clearance
HACCP	Hazard analysis critical control points
HC	Health Certificate, issued by the FSSAI
MRL	Maximum Residue limits
RMR	Risk Management Recommendations

EXECUTIVE SUMMARY

Both EU and Indian legislation in the Food Safety sector fundamentally refer to the international principles and standards shared in the framework of the Codex Alimentarius.

So, the general hygiene principles, e.g., the HACCP model, are mirroring those laid down in the relevant Codex documents. As a consequence, no significant difference can be expected when we consider official controls performance to ensure the common objectives achievement, except, of course, possible differences as far as the competent Authorities organization is involved.

Coming to specific requirements in terms of food additives, contaminants and veterinary drugs residues, it would seem that some kind of clarification is necessary to better understand the meaning of certain terms and definition, were, e.g., the term “meat product(s)” could be intended both as “meat-based product”, meaning a product resulted of a process of transforming or anyhow changing the nature of meat (see Annex I to Reg EC 853/04) or any kind of product originated from fresh meat.

Again, when considering the Maximum Residue Level (MRL) for certain veterinary drugs (such as some sulphonamides or common antibiotics like Ampicillin) Indian legislation lays down lower limits that could bring to non-compliant products to be exported to India. Noteworthy, the Codex document “Maximum residue limits (MRLs) and risk management recommendations (RMRs) FOR residues of veterinary drugs in foods” (CX/MRL 2-2021) does not provide any guide for most of the molecules taken into consideration by the Indian regulation. Moreover, in some cases it seems that the fixed MRL doesn’t originate from a risk assessment process, but are established in an apodictic way (many MRLs are established at 0,01 ppm), irrespective of the technical available analytical instruments. It’s possible that, in these cases, the Indian approach is similar to that of Reg. (EC) 396/2005 of MRL of pesticide aiming to align laboratories’ reports in case no standardized analytical method is laid down. A detailed analysis of these aspect is presented in annex III and IV.

INTRODUCTION

A gap analysis was performed on the current health certification requirements by the Food Standards and Safety Agency of India (FSSAI) in relation to pork and pork products.

The outcome of this analysis should help DG Trade to inform the European industry and its associations how to overcome the potential new export barriers that may follow from India's new Health Certificate Requirements.

METHODOLOGY

The comparison of India Health Certificate for import of pork and pork products into India as per F.No. 1829/Health Certificate/FSSAI/Imports-2021 Food Safety and Standard Authority of India and EU requirements was made and is presented in a format table. An additional column is inserted that allows a review of the conclusions and recommendations.

The outcome of the validation can result into 4 types of different recommendations and actions:

- Agreement/Approval:	green
- Additional clarification:	yellow
- Needs further investigation:	orange
- In breach with current European legislation/having a significant impact on export:	Red

ANALYSIS OF THE REQUIREMENTS OF INDIA VETERINARY CERTIFICATE

India Health Certificate for import of pork and pork products into India as per F.No. 1829/Health Certificate/FSSAI/Imports-2021 Food Safety and Standard Authority of India

Text of attestation in the new health certificate	Comment/Analysis	EU controls	Related International Standards	Review
	Point 15: Attestations			
(a)[the products] were manufactured at (an) establishment(s) that has/have been approved by, or otherwise determined to be in good regulatory standing with the Competent Authority in the exporting country	This requirement matches the corresponding requirements laid down in Reg. (EC) n. 852/04 (art. 6.2 and 6.3) and in Reg. (EC) n. 853/04 (art. 4.1)	Regulation (EU) on official controls lays down the regulatory frame for establishments' approval (art. 148) and provides for the establishments' approval withdrawal or suspension in case of serious non compliances are observed in the framework of official controls (art 138)	Principles and guidelines for national food control systems **(CAC C/GL 82-2013)** at point 40 lays down: "Legislation may also include provisions, as appropriate, for the registration of establishments, establishment approval, licensing or registration of traders, equipment design approval, penalties in the event of non-compliance and charging of fees or levies"	No additional comments
(b)The pork or pork product(s) come(s) from animal(s) slaughtered in abattoirs/processing plant(s) where no meat other than pork has been processed during production of fresh meat or added to the meat products at any stage during production	These requirements are not present in EU legislation. Different domestic ungulates species (e.g., bovine and swine) could be processed at the same slaughterhouse in different times or along different lines provided that the lines should be designed and operated separately to prevent cross-contamination. Meat based products could be produced with meat or other ingredients (e.g., casings) coming from different animal species	Any official establishment is to be subject to regular official controls that, at slaughterhouses are to be performed by an official veterinarian. The Competent Authorities staff shall verify compliance with the relevant requirements laid down in EU regulations and, where required, in official certificates agreed with third Countries to export meat of meat products	No mention in CODEX documents about the obligation not to process different animal species at the same establishment	Complete pork meat and pork meat products segregation from any other animals' meat or meat products could represent a difficult for some establishments. It's important that this requirement may be complied with not only in space, but even in time

Text of attestation in the new health certificate	Comment/Analysis	EU controls	Related International Standards	Review
(c) Prepared, packed, held and transported prior to export under good hygienic conditions and an effective food safety control system, implemented within the contest of HACCP system where appropriate and in accordance with the requirements specified in Schedule 4, as applicable, of the Food Safety and Standard (Licensing and Registration of Food Businesses) Regulation, 2011 (India) and such other guidelines as specified from time to time under the provisions of the Food Safety and Standard Act, 2006	Indian requirements are substantially in line with the ones laid down in Reg. (EC) n. 852/04, articles 4, 5, 6 and annex II. Establishments dealing with pork meat and pork meat products shall comply, as well, with the adjunctive requirements mirroring the ones laid down in Reg (EC) n. 853/04 and in its annexes., as well as in other relevant regulations (e.g., in Reg. EC n. 1/05 and Reg. EC n. 1099/09) In detail, Food Business Operators (FBO) operating an establishment, in the meaning specified in Reg. (EC) n. 852/04 as "any unit of a food business", shall notify the appropriate competent authority of each establishment under its control that carries out any of the stages of production, processing and distribution of food, with a view to the registration or, whenever provide for in Reg. (EC) n. 853/04, approval of each such establishment. FBOs carrying out any stage of production, processing and distribution of food, shall comply with the general hygiene requirements laid down in Annexes to Reg. (EC) n. 852/04 and, when appropriate, to Reg. (EC) No 853/04. Moreover, FBOs operating at any stage after primary production, shall put in place, implement and maintain a permanent procedure or procedures based on the HACCP principles. As far as personal hygiene is involved, the Indian Regulation orders the mandatory vaccination of the establishment staff against the enteric group of diseases	Reg. (EU) 2017/625 lays down the general principle to perform official controls on any registered or approved establishment to verify compliance with the relevant requirements and to ascertain FBOs' ability, and will, to achieve the Food Law objectives. Re. (EU) 2019/627 lays down uniform practical arrangements for the performance of official controls on products of animal origin, including fresh meat, intended for human consumption. In the framework of official controls, the establishments' registration and, where required, approval, shall be assessed as well as the respect of the general and specific requirements laid down in Reg. (EC) n. 852/04 and (EC) n. 853/04, including the preparation, implementation and maintenance of a Food Safety Management System to adequately prevent, or reduce to an acceptable level, risks related to the establishment's specific processes and products.	The "Code of hygienic practice for meat" (**CAC/RCP 58-2005**), explicitly identifies HACCP model as a "proactive means of process control for food safety purposes" (point 9.2.2). The HACCP system is displayed in "General principles of food hygiene" (**CXC 1-1969**). No indication about staff mandatory vaccination against some disease to prevent food contamination is generally included in CODEX guides or standards	Differences about the practical way to deal with personal hygiene and prevention of disease spread (e.g., mandatory vaccination) should be taken in consideration

Text of attestation in the new health certificate	Comment/Analysis	EU controls	Related International Standards	Review
(d)Does not contain drug/antibiotic/mycotoxins/pesticides, heavy metals residues etc, above the limits prescribed by the Food Safety and Standards (**Contaminants, toxins and Residues**) Regulation 2011	In general, there are few differences between the Indian and European MRL for contaminants, where both the Indian and European regulations lay down criteria for contaminants in foods. Some MRL established in the Indian Reg. have no correspondence in the EU regulations, including drugs that are not currently used in veterinary medicine. Some criteria are applicable both to raw meat and viscera as well as to meat products. A more in-depth analysis is provided for in the **annex III & IV**	Under the term "contaminants", the Indian Regulation includes diverse groups of compounds whose criteria are laid down in different EU regulations. Environmental contaminants are, generally, dealt with in Reg. (EC) n. 1881/2006, the legal reference as far as the maximum contaminants contents in foods are involved. Requirements as far as contaminants in food additives are involved may be found in Reg. (EC) n. 231/2012 laying down specifications for food additives and, only for some food matrix, in Reg (EC) n. 853/04. Reg (EU) n. 27/2010 lays down requirements on pharmacologically active substances and their classification regarding maximum residue limits in foodstuffs of animal origin. Official controls on residues are performed according to Reg. (EU) 2017/625 integrated by Reg. (EU) 2019/2090, laying down detailed rules in cases of suspected or established non-compliance with Union rules, and Reg. (EU) 2022/1644 and 2022/1646, laying down requirements for the performance of official controls on the use of pharmacologically active substances authorised as veterinary medicinal products or as feed additives and of prohibited or unauthorised pharmacologically active substances and residues thereof		Some problem could arise as Indian criteria refer both to raw meat as well as to meat products, where EU legislation is applicable only to raw materials or where there is no legal criterion in EU regulations. The Indian Regulation lays down MRL for some antimicrobial compounds of common veterinary use (e.g., Ampicillin and sulphonamides) definitely more stringent than those set in Reg. (EU) n. 37/2010 Other difficulties could be represented by the lack of clear indication about the analytical methods to be used to detect and quantify residues from some drugs

Text of attestation in the new health certificate	Comment/Analysis	EU controls	Related International Standards	Review
(e)Contains only those **food additives** as specified in Appendix A of Food Safety and Standards (Food Product Standards and Food Additives) Regulation, 2011 and within the limits specified	Chapter 3 of the Food Safety and Standards Regulation specifies the Food additives quality standards as well the principles for their use. The carry over principle is represented, similarly to what is provided for in EU legislation. Appendix A to the Food Safety and Standard Regulation lists all the food additives permitted in different food categories as described in the Food Category System that adopts a hierarchical system, in the meaning that when an additive is permitted in a general category, it can be used in all sub-categories, unless differently specified. In general, the Indian approach and the Reg. architecture are close to the EU ones. It should be noted that the Indian Reg. permits the use of some additives forbidden according to EU legislation, and of some molecules whose use is permitted in foods different from meat and meat products. Minor difference in maximum content for other additives. It should be highlighted that Indian Reg. refers to nitrites content as "residual NO^2 ion" and doesn't mention nitrates as food additives in meat and meat products (evidence of their use is given by the NO^2 ion content) A more in-depth analysis is provided for in the **annex V**	Detailed rules regarding the correct use of food additives are set by Reg. (EC) n. 1333/08. Reg. (EC) n. 231/2012 lays down specifications for food additives. The food safety general principles and requirements laid down in Reg. (EC) n. 178/02 are applicable to food additives as well. The principle for the organization and the performance of official controls on food additives and on their use are laid down in Reg. (EU) 2017/625		No additional comments
(f) Regular inspection/ monitoring of checks in accordance with Food Safety and Standard Act 2006, rules and Regulations made thereunder and as per the criteria specified by FSSAI	See above	See above		No additional comments

ANNEXES

ANNEX 1: THE FOOD SAFETY AND STANDARDS (FOOD PRODUCTS STANDARDS AND FOOD ADDITIVES) REGULATION, 2011

Only aspects/items that might present interpretative difficulties or clear differences between the Indian and EU regulations are taken into consideration.

2.5. MEAT AND MEAT PRODUCTS

2.5.1 Definition

"Meat food products" means any product prepared from meat and other ingredients through various processing methods in which meat should be the major ingredient of all the essential ingredients but shall not include the following products:

(i) Meat extracts, soup, stock and meat sauces;

(ii) Products containing fragments of meat, but which contain a quantity of meat or meat product not exceeding ten percent of the total weight of the final product

The definition is to be compared with the following Reg. (EC) n. 853/04 definitions:

'Meat products' means processed products resulting from the processing of meat or from the further processing of such processed products, so that the cut surface shows that the product no longer has the characteristics of fresh meat.

'Meat preparations' means fresh meat, including meat that has been reduced to fragments, which has had foodstuffs, seasonings or additives added to it or which has undergone processes insufficient to modify the internal muscle fibre structure of the meat and thus to eliminate the characteristics of fresh meat.

The definition provided by the Indian regulation seems to include both "meat products" and "Meat preparation". "Composite products" are clearly excluded.

"Canning or retorting": Meat or meat product is packed in airtight cans, retort pouches or any other containers suitable to the products and processed in thermal processing equipment to specified temperature, pressure and time combination to render the product commercially sterile. The sealed containers shall not show any changes on incubation at 35°C for 10 days or 55°C for 5 days.

There is no definition for Commercial sterility in EU regulation [Reg. (EC) n. 853/04 establishes a stability requirement for UHT milk that have to remain microbiologically stable after incubating for 15 days at 30 °C in closed containers or for seven days at 55 °C in closed containers]. The "stability" requirements laid down in the Indian regulation are in line with the current technical indication.

Comminute or Restructured Meat Products. Comminute products include meat emulsions or batters and can be prepared from meat, mechanically deboned or separated meat.

Mechanically recovered meat (MRM) cannot be used over 20% of the meat portion of the product.

No definition of Mechanically recovered meat is provided for in the Indian Reg. It seems it can be assimilated to the definition of 'Mechanically separated meat (MSM' in Reg. (EU) n. 853/04. There is no limit to the usage of MSM in the production of meat products in EU reg.

Cooked or Semi-Cooked Meat Products Cooked meat product must be processed to a minimum core temperature of 75°C. Semi-cooked meat products are not ready to eat products to be furtherly processed. Both kind of products may be in chilled, stored and transported at or below 4°C, or in frozen form, stored and transported at or below -18°C.

The minimum core temperature may represent a limit for some RTE cooked products processed according to EU good practices that do not specify any minimum temperature criterion. Similarly, temperature criteria for storage and transport are not set by EU reg. that, in general, leave to the relevant Food Business Operator the responsibility to define temperature, taking into account, among the other, the products' shelf-life

FRESH OR CHILLED OR FROZEN PORK OR PIG MEAT

The Indian reg. lays down temperature requirements for fresh (chilled) pork temperature (between +0°C and +4°C) and frozen pork meat (lower than -18°C) different from those established by Reg. (EC) n. 853/04 (from 0°C to +7°C for fresh meat, no criterion for frozen meat) and sets a durability period both for chilled (to be consumed by 4 days) and frozen pork meat (to be consumed by 10 months) that are not established by EU legislation

Proprietary Food

A definition of "Proprietary Food" is provided for in the Indian reg., with no equivalent term or definition in EU legislation, indicating any food that has not been standardised under these regulations, but does not include novel foods, foods for special dietary uses, foods for special medical purposes, functional foods, nutraceuticals, health supplements and such other food articles which the Version-XXVII (02.02.2023) Central Government may notify in this behalf. Proprietary food shall contain only those ingredients other than additives which are either standardised or permitted for use in the preparation of food products under the Food Safety Standards and Regulations.

Only food additives permitted according to the Indian Reg, shall be used in a proprietary food. The relevant micro criteria specified in the Reg are applicable to these foods.

RADIATION PROCESSING OF FOOD

The Indian regulation provides for meat and meat products irradiation criteria (expressed in kilo Gray). According to EU Food Law, pork meat and meat products cannot be irradiated both to eliminate pathogenic microorganisms and to extend shelf-life and to control human parasites.

ANNEX 2: MICROBIOLOGICAL CRITERIA

Appendix B, table 5 the Indian Regulation lays down Microbial Standards for Meat and Meat Products.

Table 5A includes process hygiene criteria [Aerobic Plate Count, Yeast and Mould Count, (generic) Escherichia coli, Staphylococcus aureus (Coagulase +ve)], table 5B food safety criteria [[Salmonella, Listeria monocytogenes, Sulphite Reducing Clostridia, Clostridium Botulinum, Campylobacter Spp.]

Footnote n.1 lays down the definition and requirements for “Chilled meat” - Fresh meat which has been washed with potable water and kept between 0-7 °C not in accordance with the general statement in the first part of the Reg, requiring a storage temperature not above +4°C.

Food safety criterion for Salmonella in poultry meat is applicable to Salmonella enterica serovars Typhi, Typhimurium and Enteritidis. It should be noted that Salmonella Typhi is specifically linked only to human beings, so it seems inappropriate to analyse poultry meat for this serotype.

ANNEX 3: CONTAMINANTS

Under the term “contaminants, the Indian Regulation(s) include diverse groups of compounds whose criteria are laid down in different EU regulations.

Environmental contaminants are, generally, dealt with in Reg. (EC) n. 1881/2006, the legal reference as far as the maximum contaminants contents in foods are involved.

More requirements as far as contaminants are involved may be found in Reg. (EC) n. 231/2012 laying down specifications for food additives and, only for some food matrix, in Reg (EC) n. 853/04

In the following table are summarised the limits laid down in the Indian and European legislation, whenever a specific reference may be found in EU regulations. Short comments are laid down whenever necessary.

Metals

Lead: there is no significant difference between the analytical criteria laid down in EU and Indian legislation. Generally speaking, the Indian limits for lead in food of animal origin are higher or equal to those defined by Reg. (EU) 1881/06.

Foodstuffs	EU Maximum levels (mg/kg wet weight)	reference	Indian maximum level (mg/kg or mg/l)
Meat (excluding offal) of bovine animals, sheep, pig and poultry	0,10	Reg. (EC) n. 1881/2006	0,1 [also applies to fat from meat]
Offal of bovine animals and sheep	0,20	Reg. (EC) n. 1881/2006	0,5
Offal of pig	0,15	Reg. (EC) n. 1881/2006	0,5

Copper: there is no analytical criterion for copper in food of animal origin in Reg. (EU) n. 1881/06. Limits are established for certain food additives: calcium carbonate, gold, potassium aluminium silicate by Reg (EC) n. 231/2012 and for certain foods of animal origin by Reg. (EC) n. 853/04. The Indian Reg., apparently, lays down a criterion for any kind of food ("food not specified"). This could represent a critical aspect that should be clarified, unless it can be demonstrated that the criterion is generally met by foodstuffs put on the Community market

Foodstuffs	EU Maximum levels (mg/kg wet weight)	reference	Indian maximum level (mg/kg or mg/l)
Gelatine and collagen	30	Reg. (EU) n. 853/04	30 [edible gelatine]
Food not specified			30 [Foods not specified]

Arsenic (inorganic): no criterion has been laid down in Reg. (EC) n. 1881/06 in animal foodstuffs. Limits are established for certain food additives by Reg. (EC) n. 231/2012 and for certain foods of animal origin by Reg. (EC) n. 853/04. In general, the criteria laid down by the Indian regulation are the same or higher than those in EU Reg. Problems could arise from criteria for foodstuffs not included in those listed in Reg. 1881. A specific mention about these criteria should be made in the health certificate, unless it can be demonstrated that they are generally met by foodstuffs put on the Community market

Foodstuffs	EU Maximum levels (mg/kg wet weight)	reference	Indian maximum level (mg/kg or mg/l)
Riboflavin	3	Reg. (EC) n. 231/2012	5
Tartrazine	3	Reg. (EC) n. 231/2012	3
Sunset yellow	3	Reg. (EC) n. 231/2012	3
Carmoisine	3	Reg. (EC) n. 231/2012	3
Ponceau 4R	3	Reg. (EC) n. 231/2012	3
Erythrosine	3	Reg. (EC) n. 231/2012	3
Alginic acid	3	Reg. (EC) n. 231/2012	3
Ammonium carbonate	3	Reg. (EC) n. 231/2012	0,6
Gelatine and collagen	1	Reg. (EC) n. 853/04	1,1 [Foods not specified]
Animal fats (including pork fat)	-		0,1 [Animal fats (lard, rendered pork fat, premier jus(suet) and edible tallow)]

Tin: some criteria have been laid down in Reg. (EC) n. 1881/06 in relation to canned foods. In general, the limits established by the Indian regulation are equivalent or higher to those laid down in Reg. 1881. An exception could be represented by the group named "Cooked cured chopped meat, cooked cured ham and pork shoulder, corned beef, luncheon meat in containers different from tinplate containers" that has no clear equivalent in EU Reg. It should be clarified what kind of foods are included in the group "Foods not specified", even if the criterion seems to be higher than the one laid down in EU legislation for the generality of foods

Foodstuffs	EU Maximum levels (mg/kg wet weight)	reference	Indian maximum level (mg/kg or mg/l)
Canned foods other than beverages	200	Reg. (EC) n. 1881/2006	250 [Cooked cured chopped meat in tinplate containers]
Canned foods other than beverages	200	Reg. (EC) n. 1881/2006	200 [Cooked cured ham and pork shoulder, corned beef, Luncheon meat in tinplate containers]
Canned foods other than beverages	200	Reg. (EC) n. 1881/2006	250 [Corned beef, Luncheon meat, Cooked ham, Chopped meat, Canned chicken, Canned mutton and Goat meat]
Canned foods other than beverages	200	Reg. (EC) n. 1881/2006	200 [Processed and canned food products (different from those listed otherwise?)]
			50 [Cooked cured chopped meat, cooked cured ham and pork shoulder, corned beef, luncheon meat in containers different from tinplate containers]
			250 [Foods not specified]

Cadmium: no criterion is specifically established by Indian regulation for meat and meat products. The limit laid down for any "Food not specified" is however higher than the ones laid down in Reg 1881 for any kind of meat from mammalians (and poultry)

Foodstuffs	EU Maximum levels (mg/kg wet weight)	reference	Indian maximum level (mg/kg or mg/l)
Food not specified			1,5 [no criterion is established for meat and meat products different from fish and crustacea. As a consequence, the general criterion could be implemented]
Liver of bovine animals, sheep, pig, poultry and horse	0,50	Reg. (EC) n. 1881/2006	-
Kidney of bovine animals, sheep, pig, poultry and horse	1,0	Reg. (EC) n. 1881/2006	-

Mercury: no criterion is specifically established by Indian and EU regulations for meat and meat products. The limit laid down in the Indiana Reg. for any "Food not specified" could therefor applied even to these foodstuffs

Foodstuffs	EU Maximum levels (mg/kg wet weight)	reference	Indian maximum level (mg/kg or mg/l)
Foods not specified			1 – 0,25 [the lower limit is applicable Methyl Mercury (Calculated as the element), the higher to Mercury (as a metal)]

Chromium: no limit is established for this metal in meat and meat products both in the Indian Reg. and in Reg (EC) 1881/06. A criterion is laid down only for gelatine and collagen (only in EU Reg)

Foodstuffs	EU Maximum levels (mg/kg wet weight)	reference	Indian maximum level (mg/kg or mg/l)
Gelatine	10.0	Reg. (EC) n. 853/04	10

Nickel: no limit is established for this metal in meat and meat products both in the Indian Reg. and in EU legislation

Selenium: no limit is established for this metal in meat and meat products both in the Indian Reg. and in EU legislation

Antimony: no limit is established for this metal in meat and meat products both in the Indian Reg. and in EU legislation

Mycotoxins

Aflatoxins: no limit is established for this toxin in meat and meat products both in the Indian Reg. and in EU legislation. Nonetheless, Indian Reg. establishes a criterion for foods containing foodstuffs that could be contaminated by aflatoxins (such as spices or nuts). So, attention should be paid to meat-based product containing such ingredients even if the maximum content is much higher than those provided for in EU legislation for any single element

Foodstuffs	EU Maximum levels (µg/kg)	reference	Indian maximum level (µg/kg)
Food product containing any of the above-mentioned food articles			20

PCB

PCB (Sum of PCB28, PCB52, PCB101, PCB138, PCB153 and PCB180): non limit is laid down in Indian Reg.

Foodstuffs	EU Maximum levels (µg/kg)	reference	Indian maximum level (µg/kg)
Pork meat and pork meat products (excluding edible offals)	40 ng/g fat (the maximum level expressed on fat is not applicable for foods containing < 2 % fat		-

Pesticides

The MRL for pesticides (insecticides, herbicides and fungicide) are laid down in Reg. (EU) n. 236/2005. Many compounds listed in Indian Reg. are, at present, not on the Community market (They are forbidden), as a consequence, the legal criterion shall be identified with the current Level of Detection (LOD). As highlighted under here for some contaminants, the definition of "meat products" recurrent in the Indian Reg., should be better clarified.

2,4-Dichlorophenoxy Acetic Acid (herbicide). No criterion in EU legislation

Foodstuffs	EU Maximum levels (µg/kg)	reference	Indian maximum level (µg/kg)
Meat and Poultry	-		0,2

Acephate (expressed as mixture of Methamidophos and acephate). The use of the product is prohibited in EU

Foodstuffs	EU Maximum levels (µg/kg)	reference	Indian maximum level (µg/kg)
Meat and Meat products	-		0,05

Acetamiprid (insecticide): Criteria in EU legislation are generally the same or more stringent than in Indian Reg

Foodstuffs	EU Maximum levels (µg/kg)	reference	Indian maximum level (µg/kg)
Pork meat, preparations of meat, offals, blood, animal fats fresh chilled or frozen, salted, in brine, dried or smoked or processed as flours or meals other processed products such as sausages and food preparations based on these	0,05 (Meat and fat free of lean meat), 0,1 (liver), 0,2 (kidney), 0,05 (edible offals)	Reg. (EC) 396/2005	0,05 [Meat and Meat products]

Carbendazim (antifungal): Criteria in EU legislation are more stringent than in Indian Reg

Foodstuffs	EU Maximum levels (µg/kg)	reference	Indian maximum level (µg/kg)
Meat, preparations of meat, offals, blood, animal fats fresh chilled or frozen, salted, in brine, dried or smoked or processed as flours or meals other processed products such as sausages and food preparations based on these	0,05	Reg. (EC) 396/2005	0.1 Meat and Poultry (carcass fat basis)

Bitertanol (fungicide): Criteria in EU legislation are more stringent than in Indian Reg when referred to fresh meat in the meaning of Reg (EC) n. 853/04. Drying process associated to some meat-based products could bring to a concentration of the contaminant

Foodstuffs	EU Maximum levels (µg/kg)	reference	Indian maximum level (µg/kg)
Meat and Meat products	0,01 (fresh meat)	Reg. (EC) 396/2005	0,05

Carbofuran (insecticide): Criteria in EU legislation are more stringent than in Indian Reg

Foodstuffs	EU Maximum levels (µg/kg)	reference	Indian maximum level (µg/kg)
Animal tissues	0,01	Reg. (EC) 396/2005	0,10 (carcass fat basis)

Chlorantraniliprole (insecticide): **Criteria in EU legislation are more stringent than in Indian Reg when referred to fresh meat in the meaning of Reg (EC) n. 853/04. Drying process associated to some meat-based products could bring to a concentration of the contaminant**

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Meat and meat products	0,2 (fresh meat)	Reg. (EC) 396/2005	0,2 (meat and meat products)

Chlorothalonil (fungicide): Criteria in EU legislation are the same as in Indian Reg when referred to fresh meat in the meaning of Reg (EC) n. 853/04. Drying process associated to some meat-based products could bring to a concentration of the contaminant

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Pork tissues	0,02 (muscle, liver, kidney, edible offal); 0,07 (fat);	Reg. (EC) 396/2005	0,02 (Meat and Meat products)

Chlorpyrifos (insecticide): the product is no longer authorized in EU. The legal criterion is established on the basis of the available laboratories' LOD

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Any	0,01	Reg (EU) 2020/1085	0,1 (Meat and Poultry (carcass fat)

Clothianidin (insecticide): it should be clarified, from the analytical point of view, whether current EU analytical methods are able to reveal also the Clothianidin metabolites

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Swine products	0,02 (commodities from swine)	Reg. (EC) 396/2005	0,02 (meat and meat products - the reference value is calculated including the insecticide metabolites)

Cypermethrin (insecticide): Criteria in EU legislation are more stringent than or equal to those laid down in Indian Reg. It should be clarified whether under the terms "meat and poultry" meat-based products are included as well

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Swine meat	2 (meat and fat); 0,2 (liver, kidney and edible offal)		2 (meat and poultry)

Deltamethrin (insecticide): Criteria in EU legislation are more stringent than or equal to those laid down in Indian Reg. It should be clarified whether under the terms "meat and meat products" meat-based products are included as drying process associated to some meat-based products could bring to a concentration of the contaminant

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Commodities from swine (Pork meat and offal)	0,2 (meat); 0,5 (fat); 1,5 (liver, kidney and edible offal)		0,5 (meat and meat products)

Difenoconazole (fungicide): Criteria in EU legislation are more stringent than or equal to those laid down in Indian Reg. It should be clarified whether under the terms "meat and meat products" meat-based products are included as drying process associated to some meat-based products could bring to a concentration of the contaminant

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Commodities from swine (Pork meat and offal)	0,05 (muscle and fat); 0,2 (liver, kidney and edible offal)		0,2 (meat and meat products)

Dimethoate (insecticide): the approval of the active substance dimethoate has not been renewed, so at present it cannot be put on the market in EU

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Tissue from swine	No MRL present. Meat and offal should not present any residue		0,05 (meat and meat products)

Mancozeb (fungicide): the approval of the active substance mancozeb has not been renewed, so at present it cannot be put on the market in EU. At present, the criterion in EU legislation is more stringent than the one laid down in Indian Reg

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Products of animal origin-terrestrial animals, including meat, preparations of meat, offals, blood, animal fats fresh chilled or frozen, salted, in brine, dried or smoked or processed as flours or meals other processed products such as sausages and food preparations based on these	0,05		0,1 (Meat and Meat products).

Edifenphos (fungicide):

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Swine tissue	No MRL has been fixed for this kind of stuff in EU legislation		0,02 (carcass fat basis)

Ethion (insecticide): the criterion in EU legislation is more stringent than the one laid down in Indian Reg

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Products of animal origin-terrestrial animals including meat, preparations of meat, offals, blood, animal fats fresh chilled or frozen, salted, in brine, dried or smoked or processed as flours or meals other processed products such as sausages and food preparations based on these	0,01		0.2 (carcass fat basis)

Etofenprox (insecticide): in general, EU criteria are more stringent than the Indian ones. Problems could arise from the use of offals to prepare meat-based products

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Commodities from swine	0,05 (muscle, liver and kidney); 1,5 fat and edible offal different from liver and kidney)		0,5 (meat and meat products)

Fenpropathrin (insecticide)

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Swine tissues	No MRL laid down in these foodstuffs		0,02 (Meat and meat products)

Fenvalerate (insecticide): EU criteria are more stringent than the Indian ones

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Swine tissues	0,02 (muscle, liver, kidney, edible offal); 0,03 (fat)		1,0 (Meat and Poultry, carcass fat basis)

Fipronil (insecticide): EU MRL correspond to the LOD. No problem there should be in observing the Indian criterion

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Swine tissues	0,005		0,01 (meat and meat product)

Flusilazole (fungicide): EU criteria are more stringent than the Indian ones, in particular, the limit for meat correspond to the LOD. No problem there should be in observing the Indian criterion

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Swine tissues	0,02 (meat); 0,05 (fat, kidney); 0,2 (liver); 0,1 (edible offal); 0,1 (other)		1 (Meat and meat products)

Glyphosate (herbcide): in general, EU criteria are the same as the Indian ones, with the exception of kidney. The MRL for meat correspond to the LOD. It should be clarified whether under the terms "meat and meat products" meat-based products are included as drying process associated to some meat-based products could bring to a concentration of the contaminant

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Swine tissues	0,05 (meat, fat, liver, offal, other); 0,5 (kidney)		0,05 (Meat and meat products)

Imidacloprid (insecticide): EU criteria are more stringent than the Indian ones, the MRL for animal tissues correspond to the LOD. No problem there should be in observing the Indian criterion

Foodstuffs	**EU Maximum levels (mg/kg)**	**reference**	**Indian maximum level (mg/kg)**
Products of animal origin - terrestrial animals - Commodities from swine	0,01		0,1 (Meat and meat products)

Indoxacarb (insecticide): Criteria in EU legislation are more stringent than or equal to those laid down in Indian Reg. It should be clarified whether under the terms "meat and meat products" meat-based products are included as drying process associated to some meat-based products could bring to a concentration of the contaminant

Foodstuffs	**EU Maximum levels (mg/kg)**	**reference**	**Indian maximum level (mg/kg)**
Swine tissues	2 (muscle, fat); 0,05 (liver, kidney, other)		2 (Meat and meat products)

Kresoxim Methyl (fungicide): Criteria in EU legislation are more stringent than or equal to those laid down in Indian Reg. Lower MRL for animal tissues correspond to the LOD. It should be clarified whether under the terms "meat and meat products" meat-based products are included as drying process associated to some meat-based products could bring to a concentration of the contaminant

Foodstuffs	**EU Maximum levels (mg/kg)**	**reference**	**Indian maximum level (mg/kg)**
Swine tissues	0,02 (muscle, fat, liver, edible offal, other); 0,05 (kidney)		0,05 (Meat and meat products)

Methomyl (insecticide): EU MRL are higher than the one laid down in Indian regulation. Moreover, drying process in meat-based products processing could bring to a concentration of the contaminant

Foodstuffs	**EU Maximum levels (mg/kg)**	**reference**	**Indian maximum level (mg/kg)**
Swine tissues	0,03 (muscle, liver, kidney); 0,5 (fat, edible offal other than liver and kidney); 0,02 (other)		0,02 (Meat and meat products)

Monocrotophos (insecticide): the approval of the active substance Monocrotophos has not been renewed, so at present it cannot be put on the market in EU.

Foodstuffs	**EU Maximum levels (mg/kg)**	**reference**	**Indian maximum level (mg/kg)**
Swine tissues	No MRL has been laid down for this substance		0,02 (meat and poultry)

Oxydemeton-Methyl (insecticide): the approval of the active substance Oxydemeton-Methyl has not been renewed, so at present it cannot be put on the market in EU

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
products of animal origin-terrestrial animals (including meat, preparations of meat, offals, blood, animal fats fresh chilled or frozen, salted, in brine, dried or smoked or processed as flours or meals other processed products such as sausages and food preparations based on these)	0,01		0,05 (meat and meat products)

Penconazole (fungicide): criteria laid down in EU are the same as those established by the Indian regulation

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Commodities from swine	0,05		0,05 (meat and meat products)

Phenthoate (insecticide):

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
products of animal origin-terrestrial animals (including meat, preparations of meat, offals, blood, animal fats fresh chilled or frozen, salted, in brine, dried or smoked or processed as flours or meals other processed products such as sausages and food preparations based on these)	No MRL has been laid down for this substance		0.05 (carcass fat basis)

Phorate (insecticide): the approval of the active substance Phorate has not been renewed, so at present it cannot be put on the market in EU

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Swine tissues	0,02 (muscle, liver, kidney, edible offal); 0,01 (fat, other)		0,02 (carcass fat basis)

Pirimiphos-methyl (insecticide): Criteria in EU legislation are more stringent than those laid down in Indian Reg. MRL for animal tissues correspond to the LOD.

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Swine tissues (including fat)	0,01	Reg. (EC) n. 396/2005	0,05 (carcass fat basis)

Profenofos (insecticide): criteria in EU legislation are the same as in Indian Reg. It should be clarified the meaning of the matrix "meat products" in the indian Reg, as the drying process in meat-based products processing could bring to a concentration of the contaminant

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
other farmed terrestrial animals (including swines)	0,05 (muscle, fat tissue, liver, kidney, other edible offal, others)	Reg. (EC) No 396/2005	0,05 (meat and meat products)

Propiconazole (fungicide): the approval of the active substance Propiconazole has not been renewed, so at present it cannot be put on the market in EU. The MRL correspond to the LOD. It should be clarified the meaning of the matrix "meat products" in the indian Reg, as the drying process in meat-based products processing could bring to a concentration of the contaminant

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Commodities from swine	0,01 (muscle, fat tissue, liver, kidney, other edible offal, others)	Reg. (EC) No 396/2005	0,01 (Meat and Meat products)

Spinosad (insecticide): EU criteria are, in general, more stringent than those laid down in Indian Reg. (the MRL in fat is the same). It should be clarified the meaning of the matrix "meat products" in the Indian Reg, as the drying process in meat-based products processing could bring to a concentration of the contaminant

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Commodities from swines	0,1 (muscle), 2 (fat, edible offal other than liver and kidney), 0,7 (liver), 0,5 (kidney), 0,02 others)	Reg. (EC) No 396/2005	2 (Meat and Meat products)

Tebuconazole (fungicide): EU MRL are significantly higher than the Indian ones. Moreover, "meat products could concentrate, due to the drying process, the contaminant, so it should be made clear the exact meaning of the term "meat products"

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Commodities from swines	0,1 (muscle, fat, others), 0,2 (liver, kidney, other offal)	Reg. (EC) No 396/2005	0,05 (Meat and Meat products)

Thiacloprid (insecticide): at present no MRL has been set in EU Reg.

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Commodities from swines	-		0,1 (Meat and Meat products)

Thiodicarb (insecticide): EU criteria are more stringent than those laid down in Indian Reg. It should be clarified the meaning of the matrix "meat products" in the Indian Reg, as the drying process in meat-based products processing could bring to a concentration of the contaminant

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Tissue from swine	0,01	Reg. (EC) No 396/2005	0,02 (meat and meat products)

Thiamethoxam (insecticide): EU criteria are more stringent than ore the same as those laid down in Indian Reg. It should be clarified the meaning of the matrix "meat products" in the Indian Reg, as the drying process in meat-based products processing could bring to a concentration of the contaminant

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Tissues from swine	0,02 (muscle, edible offal different from liver and kidney), 0,01 (fat, liver, kidney, others)	Reg. (EC) No 396/2005	0,02 (meat and meat products)

Trichlorfon (insecticide): no MRL is laid down in EU Reg. The use of this substance is banned in EU

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
			0,1 (meat and poultry)

Triadimefon (fungicide): the approval of the active substance Triadimefon has not been renewed, so at present it cannot be put on the market in EU. The MRL correspond to the LOD both according to EU and Indian legislation. It should be clarified the exact meaning of the term "meat products" as it can impact on the interpretation of analytical result

Foodstuffs	EU Maximum levels (mg/kg)	reference	Indian maximum level (mg/kg)
Tissues from swine	0,01 (muscle), 0,05 (fat, liver, kidney, other offal, others)	Reg. (EC) No 396/2005	0,02 (meat and meat products)

ANNEX IV – ANTIBIOTICS AND OTHERS PHARMACOLOGICALLY ACTIVE SUBSTANCES

Criteria for antibiotic and other pharmacological active substances are laid down in Reg. (EU) n. 37/2010 and, to some extent, in Reg. (EU) 2019/1871 on reference points for action (RPA) for non-allowed pharmacologically active substances present in food of animal origin. For some not allowed substance, the present RPA are higher than the LMR laid down in Indian regulation, and this could represent a problem from the analytical point of view.

At international level the Codex Alimentarius issued the "MAXIMUM RESIDUE LIMITS (MRLs) AND RISK MANAGEMENT RECOMMENDATIONS (RMRs) FOR RESIDUES OF VETERINARY DRUGS IN FOODS (**CX/MRL 2-2021**) containing some MRLs.

Antibiotics and veterinary drugs not permitted/prohibited:

Active substance	EU MRL (mg/kg)	Reference	Indian MRL (mg/kg)
Nitrofurans, including:	MRL cannot be established. The reference point for action (RPA) is 0,5 µg/kg	Annex to Reg. (EU) 37/2010, Table 2; Annex to Reg. (EU) 2019/1871	0,001 (1 µg/kg)
Furaltadone			0,001 (1 µg/kg)
Furazolidone			0,001 (1 µg/kg)
Nitrofurantoin			0,001 (1 µg/kg)
Nitrofurazone			0,001 (1 µg/kg)
Chloramphenicol	MRL cannot be established. The reference point for action (RPA) is 0,15 µg/kg	Annex to Reg. (EU) 37/2010, Table 2; Annex to Reg. (EU) 2019/1871	0,0003 (0,3 µg/kg)
Sulphamethoxazole	100 µg/kg		0,001 (1 µg/kg)
Aristolochia spp and preparations thereof	MRL cannot be established	Annex to Reg. (EU) 37/2010, Table 2	0,001 (1 µg/kg)
Chloroform	No MRL required	Annex to Reg. (EU) 37/2010, Table 1	0,001 (1 µg/kg)
Chloropromazine	MRL cannot be established. The proposed MMPR [minimum method performance requirement] is 5 ppb (0,005mg/kg)	Annex to Reg. (EU) 37/2010, Table 2. EURL guidance on minimum method performance requirements (MMPRs) for specific pharmacologically active substances in specific animal matrices	0,001(1 µg/kg)
Colchicine	MRL cannot be established	Annex to Reg. (EU) 37/2010, Table 2	0,001
Dapsone	MRL cannot be established. The proposed MMPR [minimum method performance requirement] is 5 ppb (0,005mg/kg)	Annex to Reg. (EU) 37/2010, Table 2; EURL guidance on minimum method performance requirements (MMPRs) for specific pharmacologically active substances in specific animal matrices	0,001

Active substance	EU MRL (mg/kg)	Reference	Indian MRL (mg/kg)
Dimetridazole, Metronidazole, Ronidazole	MRL cannot be established. The proposed MMPR [minimum method performance requirement] is 1 ppb (0,001 µg /kg)	Annex to Reg. (EU) 37/2010, Table 2; EURL guidance on minimum method performance requirements (MMPRs) for specific pharmacologically active substances in specific animal matrices	0,001 (1 µg/kg)
Ipronidazole and other nitroimidazoles	No MRL laid down. The proposed MMPR [minimum method performance requirement] is 1 ppb (0,001mg/kg)	EURL guidance on minimum method performance requirements (MMPRs) for specific pharmacologically active substances in specific animal matrices	0,001
Clenbuterol	No MRL laid down in swine tissues. The proposed MMPR [minimum method performance requirement] is 1 ppb (0,001mg/kg)	Annex to Reg. (EU) 37/2010, Table 1; EURL guidance on minimum method performance requirements (MMPRs) for specific pharmacologically active substances in specific animal matrices	0,001
Diethylstilbestrol	The proposed MMPR [minimum method performance requirement] is 1 ppb (0,001mg/kg)	EURL guidance on minimum method performance requirements (MMPRs) for specific pharmacologically active substances in specific animal matrices	0,001
Glycopeptides	No mention in EU Reg		0,001
Stilbenes and other steroids	The proposed MMPR [minimum method performance requirement] for stilbenes is 1 ppb (0,001mg/kg). For other steroids, the proposed MMPR is 1,0 ppb in muscle, 2,0 ppb in liver	EURL guidance on minimum method performance requirements (MMPRs) for specific pharmacologically active substances in specific animal matrices	0,001
Crystal Violet	No mention in EU Reg as far as swine tissues are involved		0,001
Malachite Green	The reference point for action (RPA) is 0,5 µg/kg		0,001 (1 µg/kg)
Carbadox	No mention in EU Reg. The proposed MMPR [minimum method performance requirement] is 5 ppb (0,005mg/kg).	EURL guidance on minimum method performance requirements (MMPRs) for specific pharmacologically active substances in specific animal matrices	0,001

For all prohibited substance, where no MRL has been fixed by the Reg., EURL guidance on minimum method performance requirements (MMPRs) for specific pharmacologically active substances in specific animal matrices recommends that laboratories should ensure that the CCβ [the concentration level of the analyte in sample at which there is a probability β (again usually defined as 0.05 or 5%) that the method will give a result lower than the decision limit – CCα] for screening methods or the CCα for confirmatory methods is lower than the MMPR.

Other antibiotics and veterinary drugs

Criteria for some antimicrobial compounds, specifically for all the sulphonamides, are much lower (ten times lower) in Indian Reg in respect of EU legislation, to a level that, perhaps, prevent the use of these chemicals in pigs breeding.

Active substance	EU MRL (mg/kg)	Reference	Indian MRL (mg/kg)
Ampicillin	0,05 (muscle, liver, kidney, fat)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (All edible animal tissues)
Cloxacillin	0,3 (muscle, liver, kidney, fat)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (All edible animal tissues)
Colistin	0,15 (muscle, liver, fat); 0,2 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,15 (muscle, liver, fat); 0,2 (kidney)
Streptomycin and Dihydrostreptomycin	0,5 (muscle, liver, fat); 1 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,6 (muscle, liver, fat); 1 (kidney)
Chlortetracycline/Oxytetracycline/Tetracycline	0,1 (muscle); 0,3 (liver); 0,6 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,2 (muscle); 0,6 (liver); 1,2 (kidney)
Flumequine	0,2 (muscle); 0,3 (fat); 0,5 (liver); 1,5 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,5 (muscle, liver); 3 (kidney); 1 (fat)
Lincomycin	0,1 (muscle); 0,05 (fat); 0,5 (liver); 1,5 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,2 (muscle); 0,1 (fat); 0,5 (liver); 1,5 (kidney)
Neomycin	0,5 (muscle); 0,5 (fat); 5,5 (liver); 9,0 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,5 (muscle); 0,5 (fat); 0,5 (liver); 10,0 (kidney)
Salinomycin	The compound is not permitted in pigs. In poultry the following MRL have been laid down: 0,015 (liver), 0,04 (kidney), 0,015 (muscle), 0,15 (fat)	Reg. (EU) 2017/1914	0,01 (muscle, fat liver, kidney)
Spectinomycin	0,3 (muscle); 0,5 (fat); 1,0 (liver); 5,0 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,5 (muscle); 2,0 (fat); 2,0 (liver); 5,0 (kidney)
Sulphathiazole Sodium	0,1 (muscle, fat, liver, kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Trimethoprim	0,05 (muscle, fat, liver, kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Sulfadiazine	0,1 (muscle, fat, liver, kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Sulfanilamide	0,1 (muscle, fat, liver, kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Sulfaguanidine	0,1 (muscle, fat, liver, kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Zinc Bacitracin	The compound may be used only in rabbits. No		0,01

Active substance	EU MRL (mg/kg)	Reference	Indian MRL (mg/kg)
	MRL is consequently fixed in pork tissues		
Amprolium	The compound may be used only in poultry. No MRL required		0,01 (all edible animal tissues including fats)
Apramycin	No LMR required		0,01 (all edible animal tissues including fats)
Ceftiofur	1,0 (muscle); 2,0 (fat); 2,0 (liver); 6,0 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	1,0 (muscle); 2,0 (fat); 2,0 (liver); 6,0 (kidney)
Cephapirine	The compound is permitted only in bovine. No LMR required in swine tissues		0,01 (all edible animal tissues including fats)
Clopidol	The compound is permitted only in poultry. No LMR required in swine tissues		0,01 (all edible animal tissues including fats)
Danofloxacin	0,1 (muscle); 0,05 (fat); 0,2 (liver); 0,2 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,1 (muscle); 0,1 (fat); 0,05 (liver); 0,2 (kidney)
Enrofloxacin	0,1 (muscle); 0,1 (fat); 0,2 (liver); 0,2 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Ethopabate	The compound is permitted only in poultry. No LMR required in swine tissues		0,01 (all edible animal tissues including fats)
Sulphaquinoxaline	0,1 (muscle, fat, liver, kidney). The compound is used to control coccidiosis in poultry and rabbits.		0,01 (all edible animal tissues including fats)
Sulfadimidine	0,1 (muscle, fat, liver, kidney)		0,1 (species different from cattle in muscle, fat, liver, kidney)
Tilmicosin	0,05 (muscle); 0,05 (fat); 1,0 (liver); 1,0 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,1 (muscle); 0,1 (fat); 1,5 (liver); 1,0 (kidney)
Tylosin	0,1 (muscle); 0,1 (fat); 0,1 (liver); 0,1 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,1 (muscle); 0,1 (fat); 0,1 (liver); 0,1 (kidney)
Tyvalosin Tartrate	0,05 (muscle); 0,05 (fat); 0,05 (liver); 0,05 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Virginiamycin	The compound is permitted only in poultry. No LMR required in swine tissues		0,01 (all edible animal tissues including fats)
Acepromazine	The compound is not permitted in swine. No MRL required in swine tissues		0,01 (all edible animal tissues including fats)
Albendazole	No MRL required	Annex to Reg. (EU) 37/2010, Table 1	0,1 (muscle, fat); 5,0 (liver, kidney)

Active substance	EU MRL (mg/kg)	Reference	Indian MRL (mg/kg)
Amitraz	0,4 (fat and skin), 0,2 (liver); 0,2 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Aspirin (Acetylsalicylic acid)	No MRL required	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Buqarvaquone	No MRL		0,01 (all edible animal tissues including fats)
Buserelin	No MRL required	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Butafosfane/Butaphosphan	No MRL required	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Calcium Borogluconate/Calcium Magnesium Borogluconate	No MRL required	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Carboprost tromethamine	(dinoprost tromethamine) No MRL required	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Cefquinome Sulphate	0,05 (muscle); 0,05 (fat); 0,1 (liver) 0,2 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Chloral hydrate	No MRL		0,01 (all edible animal tissues including fats)
Cloprostenol Sodium	No MRL required	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Closantel	No MRL required in swine, the compound is not authorized for swine	Annex to Reg. (EU) 37/2010, Table 1	1 (muscle); 1 (liver) 3 (fat); 3 (kidney)
Diethylcarbamazine	No MRL		0,01 (all edible animal tissues including fats)
Dinitolmide	No MRL		0,01 (all edible animal tissues including fats)
Doramectin	0,04 (muscle); 0,15 (fat); 0,1 (liver) 0,06 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,005 (muscle); 0,1 (liver); 0,03 (kidney): 0,15 (fat)
Dexcloprostenolum	No MRL required (cloprostenol)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Flunixin Meglumine	0,05 (muscle); 0,01 (fat and skin), 0,20 (liver); 0,03 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Halofuginone	No MRL in swine tissue. Permitted in bovine	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Haloxone	No MRL		0,01 (all edible animal tissues including fats)
Ivermectin	0,030 (muscle); 0,10 (fat); 0,10 (liver); 0,03 (kidney)		0,015 (liver); 0,02 (fat)
Kaolin	No MRL		0,01 (all edible animal tissues including fats)
Ketamine hydrochloride	No MRL required	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Levamisole	0,01 (muscle, kidney, fat); 0,10 (liver)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (muscle, kidney, fat); 0,10 (liver)
Lithium Antimony Thiomalate	No MRL		0,01 (all edible animal tissues including fats)
Luprostiol	No MRL required	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)

Active substance	EU MRL (mg/kg)	Reference	Indian MRL (mg/kg)
Maduramicin	No MRL		0,01 (all edible animal tissues including fats)
Magnesium Hypophosphite	No MRL required	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Meloxicam	0,02 (muscle); 0,065 (liver, kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Mepyramine	No MRL		0,01 (all edible animal tissues including fats)
Methyl Hydroxybenzoate	No MRL No MRL required for Benzyl p-hydroxybenzoate		0,01 (all edible animal tissues including fats)
Nandrolone Laurate	Usage of this compound is forbidden. The proposed MMPR [minimum method performance requirement] is 1 ppb (0,001mg/kg) in muscle, 2 ppb in liver	EURL guidance on minimum method performance requirements (MMPRs) for specific pharmacologically active substances in specific animal matrices	0,01 (all edible animal tissues including fats)
Niclosamide	No MRL		0,01 (all edible animal tissues including fats)
Nimesulide	No MRL		0,01 (all edible animal tissues including fats)
Nitroscanate	No MRL		0,01 (all edible animal tissues including fats)
Nitroxynil	No MRL, the drug is approved for therapeutic reasons in bovines and sheep		0,01 (all edible animal tissues including fats)
Oxybendazole	0,1 (muscle); 0,5 (fat and skin); 0,2 (liver); 0,1 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Febantel/Fenbendazole/Oxyfendazole	0,05 (muscle); 0,05 (fat); 0,5 (liver); 0,05 (kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,1 (muscle); 0,1 (fat); 0,5 (liver); 0,1 (kidney)
Oxyclozanide	No MRL, the drug is approved for therapeutic reasons in ruminants	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Parabendazole	No MRL.		0,01 (all edible animal tissues including fats)
Pentobarbitone	No MRL.		0,01 (all edible animal tissues including fats)
Praziquantel	MRL not required (in sheep and equine)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Pregnant Mare Serum Gonadotrophin	MRL not required	Annex to Reg. (EU) 37/2010, Table 1	
Proligestone	No MRL.		0,01 (all edible animal tissues including fats)
Promazine Hydrochloride	MRL cannot be established. See above	Annex to Reg. (EU) 37/2010, Table 2	0,01 (all edible animal tissues including fats)
Propofol	No MRL.		0,01 (all edible animal tissues including fats)

Active substance	EU MRL (mg/kg)	Reference	Indian MRL (mg/kg)
Prosolvin	No MRL. Generally used in horse		0,01 (all edible animal tissues including fats)
Rafoxanide	No MRL, the drug is approved for therapeutic reasons in bovines and sheep		0,01 (all edible animal tissues including fats)
Semduramicin	No MRL		0,01 (all edible animal tissues including fats)
Sulpha Chloropyrazine Sodium	0,1 (muscle, fat, liver, kidney)	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Suramin	No MRL		0,01 (all edible animal tissues including fats)
Thiabendazole	0,1 (muscle, fat, liver, kidney)		0,1 (muscle, fat, liver, kidney)
Tiamulin Hydrogen Fumarate	0,1 (muscle), 0,5 (liver)		0,01 (all edible animal tissues including fats)
Toltrazuril	0,10 (muscle); 0,15 (fat); 0,5 (liver); 0,25 (kidney)		0,01 (all edible animal tissues including fats)
Xylazine	LMR not required. Use permitted in cattle and equine	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Clorsulon	No MRL. Use permitted in cattle	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Hydrocortisone	LMR not required.	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Phenazone	No MRL		0,01 (all edible animal tissues including fats)
Quinapyramine	No MRL		0,01 (all edible animal tissues including fats)
Cephacetrile	No MRL. Use permitted in cattle	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)
Chlorpyridazine	No MRL		0,01 (all edible animal tissues including fats)
Tiaprost Trometamol	No MRL required	Annex to Reg. (EU) 37/2010, Table 1	0,01 (all edible animal tissues including fats)

ANNEX V – FOOD ADDITIVES

Food Safety And Standards (Food Products Standards And Food Additives) Regulations, 2011 Annex 1, chapter 3 of the Indian regulation deals with food additives. in particular, table 8 lists the food additive that can be use in meat and meat products and, where appropriate, their maximum level.

Foodstuffs	Food additive	EU Maximum levels (mg/kg wet weight)	Indian maximum level (mg/kg or mg/l)
Processed meat and poultry products in whole pieces or cuts	polysorbates	Not permitted	5000 mg/kg
	Propyl gallate	Not permitted	200 mg/kg
	Tertiary butylhydroquinone (TBHQ)	Not permitted	100 mg/kg
	Brilliant Blue FCF	Quantum satis only for health marking	100 mg/kg
	Butylated hydroxyanisole (BHA)	Not permitted	200 mg/kg
	Butylated hydroxytoluene (BHT)	Not permitted	100 mg/kg
	Caramel III – ammonia caramel	Quantum satis (only sasages)	GMP
	Caramel IV - sulfite ammonia caramel	Quantum satis (only sasages)	GMP
	Beta-Carotenes, vegetable	20 mg/kg (only sausages)	5000 mg/kg
	Erythrosine	Not permitted	30 mg/kg
	Fast green FCF	Not permitted	100 mg/kg
	RIBOFLAVINS	Not permitted in pork meat products (only pasturmas)	300 mg/kg
	Sunset yellow FCF	15 mg/kg, only sobrasada	100 mg/kg
Non-heat-treated processed meat and poultry products in whole pieces or cuts	Phosphates	5000 mg/kg	2200 mg/kg
	Grape skin extract	Not included in EU legislation [Anthocyanins not permitted in pork meat products]	5000 mg/kg

Foodstuffs	Food additive	EU Maximum levels (mg/kg wet weight)	Indian maximum level (mg/kg or mg/l)
Cured (including salted) and dried processed meat and poultry products in whole pieces or cuts	Benzoates	quantum satis, only surface treatment of dried meat products	1000 mg/kg [only surface treatment of dried meat products]
	Isopropyl citrates	Not permitted. Other citrates are permitted only in prepacked preparations of fresh minced meat and meat preparations	200 mg/kg
	Natamycin (Pimaricin)	1 mg/kg – 8 mg/dm2 surface (only surface treatment of dried cured sausages, not present at a depth of 5 mm)	6 mg/kg
Fermented nonheated treated processed meat and poultry products in whole pieces or cuts	Sucroglycerides	Not included in EU legislation for this kind of products [5000 mg/kg in heat treated processed meat]	5000 mg/kg
	Nitrites	150 mg/kg as added compound [possible derogation to a higher use of the additive in some specific products]	80 mg/kg [as residual NO2 ion] [cooked cured ham and cooked cured pork shoulder
	nitrates	150 mg/kg as added compound [possible derogation to a higher use of the additive in some specific products]	No mention
Heat-treated processed meat and poultry products in whole pieces or cuts (canned chicken, canned mutton and goat meat)	Nisin	Not included in EU legislation for this kind of products	25 mg/kg
	Nitrites	150 mg/kg as added compound [100 mg/kg in sterilized meat products]	80 mg/kg [as residual NO2 ion] [cooked cured ham and cooked cured pork shoulder]
	Phosphates	5000 mg/kg	2200 mg/kg
	Saccharins	Not included in EU legislation for this kind of products	500 mg/kg
	Sucroglycerides	5000 mg/kg	5000 mg/kg
	Tocopherol	Not included in EU legislation for this kind of products	500 mg/kg
Frozen raw, flavoured/ marinated, processed meat and poultry products in whole pieces or cuts	Phosphates	Not included in EU legislation for this kind of products	2200 mg/kg [surface treatment only]

Foodstuffs	Food additive	EU Maximum levels (mg/kg wet weight)	Indian maximum level (mg/kg or mg/l)
Processed comminute meat and poultry products	Brilliant blue FCF	Not included in EU legislation for this kind of products	100 mg/kg
	Butylatedhydroxyanisole (BHA)	Not permitted	200 mg/kg
	Butylatedhydroxytoluene (BHT)	Not permitted	100 mg/kg
	Caramel III - ammonia caramel	Quantum satis (only sasages)	GMP
	Caramel IV - sulfite ammonia caramel	Quantum satis (only sasages)	GMP
	Erythrosine	Not included in EU legislation for this kind of products	30 mg/kg
	Grape skin extract	Not included in EU legislation [Anthocyanins not permitted in pork meat products]	5000 mg/kg
	Nitrites	150 mg/kg as added compound [100 mg/kg in sterilized meat products]	80 mg/kg [as residual NO2 ion]
	Paprika oleoresin	10 mg/kg [only sausages]	GMP
	Phosphates	5000 mg/kg	2200 mg/kg
	Polysorbates	Not included in EU legislation for this kind of products	5000 mg/kg
	Riboflavins	Not permitted in pork meat products (only pasturmas)	1000 mg/kg
	Propyl gallate	Not included in EU legislation for this kind of products	200 mg/kg
	Propylene glycol alginate	Not included in EU legislation for this kind of products	3000 mg/kg
	Sorbates	quantum satis, only surface treatment of dried meat products	1500 mg/kg
	Sodium diacetate	quantum satis	1000 mg/kg
	Tocopherol	Not included in EU legislation for this kind of products	500 mg/kg
	Tertiary butylhydroquinone (TBHQ)	200 mg/kg, only dehydtated meat [Maximum limit expressed on fat]	100 mg/kg
Non-heat treated processed comminute meat and poultry products	beta-Carotenes, vegetable	20 mg/kg [only sausages]	20 mg/kg
Cured (including salted) non-heat treated processed comminute meat and poultry products	Canthaxanthin	Not permitted in foods	100 mg/kg
Cured (including salted) and dried processed comminute meat	Isopropyl citrate	Not included in EU legislation	200 mg/kg
	Natamycin	1 mg/kg – 8 mg/dm2 surface (only surface treatment of dried cured sausages, not present at a depth of 5 mm)	20 mg/kg – 1 mg/dm2 surface (surface treatment only)

Foodstuffs	Food additive	EU Maximum levels (mg/kg wet weight)	Indian maximum level (mg/kg or mg/l)
and poultry products	Benzoates	quantum satis, only surface treatment of dried meat products	1000 mg/kg
	Sunset yellow FCF	15 mg/kg, only sobrasada	100 mg/kg
Fermented non heat treated processed comminute meat and poultry products	Sulphur dioxide	Not included in EU legislation for this kind of products	450 mg/kg
Heat-treated processed comminute meat and poultry products (canned cooked ham, canned luncheon meat, canned chopped meat)	Sucroglycerides	5000 mg/kg [Expressed on fat basis]	5000 mg/kg
	Brilliant blue FCF	Not included in EU legislation for this kind of products	200 mg/kg
	carotenoids	Not included in EU legislation for this kind of products	20 mg/kg
	Ethylene Diamine Tetra Acetates (EDTA)	Not included in EU legislation for pork meat-based products	35 mg/kg
	Sunset yellow FCF	Not included in EU legislation for this kind of products	200 mg/kg
	Tocopherols	Not included in EU legislation for this kind of products	500 mg/kg
Frozen processed comminute meat and poultry products	Mineral oil, high viscosity	Not included in EU legislation for this kind of products	950 mg/kg
	Brilliant blue FCF	Not included in EU legislation for this kind of products	200 mg/kg
	Sunset yellow FCF	Not included in EU legislation for this kind of products	200 mg/kg
Edible casings	Paprika oleoresin	Not included in EU legislation for this kind of products	GMP
	Ascorbyl Esters	Not included in EU legislation for this kind of products	5000 mg/kg
	Brilliant blue FCF	Not included in EU legislation for this kind of products	100 mg/kg
	Carotenoids	Not included in EU legislation for this kind of products	100 mg/kg
	Fast green FCF	Not permitted	100 mg/kg

Beside the listed food additives, Appendix C to the Indian regulation provides for a list of "Processing aids" that could be used in meat products according to the following table.

Foodstuffs where the compound may be used according to the Indian Reg	Food additive	EU Maximum levels (mg/kg wet weight)	Indian maximum residual level (mg/kg or mg/l) in the finished products
All foods	Polyethylene glycol	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Propylene glycol	Not permitted in any food	GMP
All foods	Sorbitan monolaurate	Not considered by EU legislation in pork meat products as an additive	1
All foods	Sorbitan monooleate	Not considered by EU legislation in pork meat products as an additive	1
All foods	Acetylated mono- and diglycerides	Not considered by EU legislation in pork meat products as an additive	100
All foods	Bees wax	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Calcium carbonate	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Glycerin/Glycerol	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Hydrogenated vegetable oil	Not considered by EU legislation on food additives	GMP
All foods	Lecithin	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Oleic acid	Not considered by EU legislation on food additives	GMP
All foods	Thermally oxidised soya-bean oil	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	White mineral oil	Not considered by EU legislation on food additives	GMP
Meat	Octanoic acid	According to EU legislation, only potable water can be used to control surface contamination of meat	GMP
Meat and poultry carcasses and cuts	Sodium metasilicate		GMP
Meat	Sodium chlorite		GMP
Raw meat and poultry	Salmonella phage preparation (S16 and FO1a)		GMP
All foods	Ammonium hydroxide	Not considered by EU legislation in pork meat products as an additive	GMP

Foodstuffs where the compound may be used according to the Indian Reg	Food additive	EU Maximum levels (mg/kg wet weight)	Indian maximum residual level (mg/kg or mg/l) in the finished products
Edible casings	Ammonium sulphate	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Argon	Quantum satis	GMP
All foods	Biotin	Not considered by EU legislation in pork meat products as an additive	
All foods	Bone phosphates	Not considered by EU legislation on food additives (phosphates are permitted in dried powered foods)	GMP
All foods	Carbon dioxide	Quantum satis	GMP
All foods	Ethyl Alcohol	Not considered by EU legislation on food additives	GMP
All foods	Furcellaran (Agar)	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Hydrogenated glucose syrups	Not considered by EU legislation on food additives	GMP
All foods	Isopropyl alcohol	Not considered by EU legislation on food additives	GMP
All foods	Liquified anhydrous ammonia	Not considered by EU legislation on food additives	GMP
All foods	Magnesium hydroxide	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Nicotinamide	Not considered by EU legislation on food additives	GMP
All foods	Nitrogen gas	Quantum satis	GMP
All foods	Oxygen	Quantum satis	GMP
All foods	Phospholipids	Not considered by EU legislation on food additives	
All foods	Phosphoric acid	See above - Phosphates	GMP
All foods	Polyethylene glycols	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Polyglycerol esters of interesterified ricinoleic acid	(Polyglycerol esters of fatty acids) Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Polyoxyethylene 40 stearate	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Potassium dihydrogen phosphate	See above - Phosphates	GMP

Foodstuffs where the compound may be used according to the Indian Reg	Food additive	EU Maximum levels (mg/kg wet weight)	Indian maximum residual level (mg/kg or mg/l) in the finished products
All foods	Potassium hydroxide	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Propylene glycol alginate	Not permitted in any food	GMP
All foods	Silica(tes)	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Sodium acid pyrophosphate (SAPP)	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Sodium bicarbonate	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Sodium calcium polyphosphate silicate	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Sodium carbonate	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Sodium dihydrogen phosphate	Not considered by EU legislation in pork meat products as an additive	GMP
All foods	Sodium Hydroxide	Not considered by EU legislation in pork meat products as an additive	GMP
	Sodium silicate	Not considered by EU legislation in pork meat products as an additive	GMP
	Sulphuric Acid	Quantum satis in filling of stuffed pasta	GMP
	Vitamin C (Ascorbic acid)	Quantum satis prepacked preparations of fresh minced meat and meat preparations	
	Vitamin B12	Not considered by EU legislation in pork meat products as an additive	