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## **COVID-19 emergency and the impact on classification systems: a preliminary focus on manufacturing industry**

*Francesca Alonzi, Simone Ambroselli, Alberto Valery*

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## COVID-19 emergency and the impact on classification systems: a preliminary focus on manufacturing industry

Francesca Alonzi, Simone Ambroselli, Alberto Valery

### Abstract

*In the first months of 2020 the international scenario was dominated by the health emergency. In Italy, containment measures adopted by the Government to limit the infection have had an initial impact on manufacturing: many large companies have added new specific products related to the COVID-19 emergency to their main activity, while some smaller enterprises have totally reconverted their activities to devote themselves to products in greater demand during the pandemic period. These conversions were also favoured by the scarcity, and in some cases the lack, of medical products and devices needed to prevent COVID-19 and medical treatment in general, which encouraged companies to focus on new businesses. From a statistical point of view, there was therefore the need to identify, within the official classification systems, the economic activities of the manufacturing sector and the products considered relevant for the prevention of COVID-19 and medical treatment in general.*

**Keywords:** COVID-19, Statistical classifications, Official Statistics, Correspondence tables, International Trade, Manufacturing sector

**JEL classification:** C18, F00, L60

### Sommario

*Nei primi mesi del 2020 lo scenario internazionale è stato dominato dall'emergenza sanitaria. A livello nazionale, le conseguenti misure di contenimento adottate dal Governo per limitare il contagio hanno avuto un primo impatto sul contesto produttivo: molte grandi imprese hanno affiancato alla loro attività principale nuove specifiche produzioni legate all'emergenza COVID-19, mentre alcune realtà più piccole hanno riconvertito totalmente le proprie attività per dedicarsi a prodotti maggiormente richiesti in questa fase. Tali riconversioni sono state anche favorite dalla scarsità, e in alcuni casi dalla mancanza, di prodotti e dispositivi medici necessari alla prevenzione del COVID-19 e al trattamento medicale in generale, fattori che hanno incoraggiato le imprese a focalizzarsi su nuovi business. Da un punto di vista statistico, è emersa quindi la necessità di identificare, nell'ambito dei sistemi di classificazione ufficiali, le attività economiche del settore manifatturiero e i prodotti considerati rilevanti ai fini della prevenzione del COVID-19 e del trattamento medicale in genere.*

**Parole chiave:** COVID-19, Classificazioni statistiche, Statistica ufficiale, Tavole di corrispondenza, Commercio estero, Settore manifatturiero

**Classificazione JEL:** C18, F00, L60

## Table of contents

<b>1. Introduction.....</b>	<b>5</b>
<b>2. Background.....</b>	<b>6</b>
<b>3. The international system of economic classifications .....</b>	<b>7</b>
<b>4. Business statistics and classification systems .....</b>	<b>9</b>
<b>5. Data and methods .....</b>	<b>9</b>
<b>6. Results .....</b>	<b>11</b>
<b>7. Discussion and conclusions .....</b>	<b>14</b>
<b>Annex 1 - HS 2017 codes used to identify COVID-19 products in the notes prepared by WTO and WCO.....</b>	<b>17</b>
<b>Annex 2 - Correspondence table between COVID-19 products and economic activities</b>	<b>23</b>
<b>Annex 3 - COVID-19 products according to the Prodcom list 2019.....</b>	<b>38</b>
<b>Annex 4 - COVID-19 economic activities according to the NACE Rev. 2 classification</b>	<b>42</b>
<b>References.....</b>	<b>43</b>

## 1. Introduction<sup>1</sup>

During the COVID-19 worldwide emergency some medical supplies have suddenly become hard to find bringing considerable attention to manufacturing of medical products to be used for prevention, testing and treatment.

Several production systems, such as the Italian one, have faced lacks of some important supplies, for instance hand sanitizers and even run out of some other necessary items, such as face masks. As the pandemic worsened, some critical issues also emerged in the provision of medical ventilators and other specific equipment for hospitals. The provision of COVID-19 test kits and diagnostic instruments was challenging, too; at the beginning obstacles were related to the availability of equipped clinical laboratories and then chemical reagents needed for the tests have become scarce.

In this scenario, the World Customs Organization (WCO), in cooperation with the World Health Organization (WHO) has prepared a list of products which are considered relevant in the prevention, testing and medical treatment of COVID-19 disease in general. At the same time, the World Trade Organization (WTO) has provided a comprehensive overview of trade and tariffs imposed on medical goods in general, many of which appear to be in severe shortage as a result of the current crisis.

More recently, the WCO and the WHO have also produced a list of medical supplies and medicines for COVID-19 with the intent of helping customs and economic operators identify them.

All the contributions make use of the Harmonised System (HS) as the reference international classification for COVID-19 medical supplies.

HS is part of an integrated system of economic classifications, developed mainly under the auspices of the United Nations Statistical Division; the system ensures comparability at world level of statistics produced on the basis of the different classifications of products and economic activities.

Nevertheless, an evaluation of the potential economic activities related to the manufacturing of the above-mentioned products is still lacking. Such an assessment is indeed important to estimate the impact of enterprises restructuring generated by the COVID-19 emergency on the production system. In Italy, these processes of industrial conversion have also been expedited by containment measures adopted by the Government to limit contagion: many large companies have added new specific products related to the COVID-19 emergency to their main activity, while some smaller enterprises have totally reconverted their activities to devote themselves to products in greater demand during the pandemic period.

Based on the international references cited above, the main objective of the paper is to offer a comprehensive overview in terms of industries and products of the medical and medical-related devices production mainly affected in the first phase of the COVID-19 emergency.

Contributions are twofold: from one side, findings are useful for experts involved in the classification activities (both administrative and statistical units); secondly, findings constitute a valid support for research activities concerning the COVID-19 period in order to evaluate the impacts on the production and international trade systems.

With regard to the methodology, it should be noted that the output is of a high degree of reliability since it is based on the rigorous application of official correspondence tables and on the respect of hierarchical constraints existing between the different standard classifications that have been considered in this research work.

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The contents of this work are divided into 7 sections. Apart from the first section that is devoted to the introduction, the second one is intended to review the most significant literature, focusing on the definition of statistical classification and presenting the recent advancements on the issue. The third section is centred on the international system of economic classification that represents the basis on which the empirical analysis has been developed. Main business statistics domains and their pivotal relationships with classification systems are briefly described in the fourth section. All data and methods used in the study are presented in the fifth section while the major results are described in the sixth section. Finally, the last section contains the main conclusive remarks on the issues dealt with in this study presenting and critically discussing the output; some possible future research developments are also introduced.

## 2. Background

In order to investigate the economic system, we need to be able to assign units and activities into sets of discrete, exhaustive and mutually exclusive categories in the collection of data and presentation of statistics to policy makers, analysts and researchers, to describe the characteristics of a particular population (Hancock, 2013). Classifications group and organize information meaningfully and systematically into a standard format that is useful for determining the similarity of objects or persons (Hoffmann and Chamie, 1999); statistical classifications are used in the production and presentation of statistics.

More specifically, “*All economic phenomena that are to be described in the form of statistics require systematic classification. Classifications are, so to speak, the system of languages used in communication about, and statistical processing of, the phenomena concerned. They divide the universe of statistical data into categories that are as homogeneous as possible with respect to those characteristics that are the objects of the statistics in question*” (United Nations, 2008).

In particular, the objective of standard (or framework) classifications is to provide a recognised framework that makes it possible to accommodate for various sets of data coming from different sources and surveys and make them comparable (Eurostat, 2019).

In the case of COVID-19, governments call for reliable data on the effects of the emergency on the labour market, production system, and the economy in general. But there can be no economic analysis without a classification (Guibert *et al.*, 1971). To this aim, and in order to promote research and ensure high level of comparability between the data produced in this field, it is thus necessary to use classification systems for products and economic activities that are universally recognised and shared among users.

Taking into account the evidence that the pandemic unfortunately has a worldwide presence, international statistical classifications constitute a valid support in this sense.

This study builds on the recent notes prepared by the World Trade Organization (WTO) and the World Customs Organization (WCO), in cooperation with the World Health Organization (WHO) to list and categorize medical supplies and medicines relevant to the COVID-19 response. They represent a first, internationally agreed recommendation to list all medical products directly involved in the COVID-19 pandemic. The sources are presented in Table 1.

**Table 1 – Informative sources**

Authors	Edition	Release date	Living document	Type of products	N. of product sections	N. of HS products
WTO	1	3 <sup>rd</sup> April 2020	No	Medical supplies and medicines	4	92
WCO and WHO	2.1	30 <sup>th</sup> April 2020	Yes	Medical supplies	8	77
WCO and WHO	1	30 <sup>th</sup> April 2020	Yes	Medicines	3	47

Source: Authors' elaboration on the basis of WCO and WTO data, 2020

The informative note prepared by the WTO and published in the early days of April 2020 lists a set of 92 products categorised into four groups: 1. Medicines (Pharmaceuticals) – including both

dosified and bulk medicines; 2. Medical supplies – refers to consumables for hospital and laboratory use (e.g. alcohol, syringes, gauze, reagents, etc); 3. Medical equipment and technology; and 4. Personal protective products – hand soap and sanitizer, face masks, protective spectacles.

The WCO-WHO list for COVID-19 medical supplies includes 87 products grouped in eight different sections: I. COVID-19 Test kits/ Instruments and apparatus used in Diagnostic Testing; II. Protective garments and the like; III. Disinfectants and sterilisation products; IV. Oxygen Therapy equipment and pulse oximeters; V. Other medical devices and equipment; VI. Other Medical Consumables; VII. Vehicles and VIII. Other.

The WCO-WHO list of priority medicines organises medicines in three categories: 1. Medicines used in the general management of hospitalised patients with COVID-19; 2. Medicines which are used as part of the direct treatment against COVID-19 in hospitalised patients; 3. Medicines where interrupted supply could result in serious health consequences.

All the documents present the products at 6-digit subheading according to the Harmonised System (HS) classification that is a multi-purpose international product classification developed by the WCO; it is a systematic list of commodities applied by most trading nations (and also used for international trade negotiations). To each product listed in the first document (WTO) it corresponds a unique HS code while the 87 products listed in the second note (WCO-WHO medical supplies) are linked to 77 HS codes. In the third document (WCO-WHO medicines) 47 HS codes have been detected.

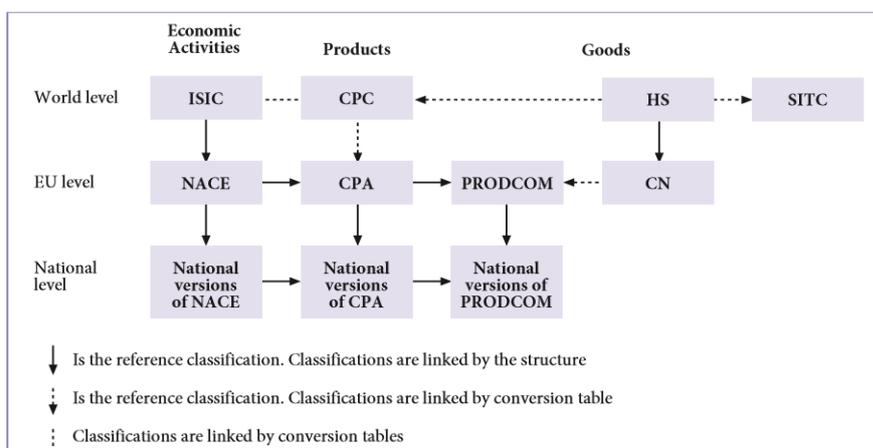
Starting from the contents of the above cited notes, the aim of our study is twofold: to derive nationally used statistical classifications of products and, at the same time, to identify a list of possible economic activities involved in the prevention, testing and treatment of COVID-19 in the manufacturing section without ignoring the fact that purposes of product classifications somehow differ from classifications of economic activities. From the one hand, product classifications are designed to categorize products that have common characteristics; they provide the basis for collecting and calculating statistics on the production, distributive trade, consumption, international trade, and transport of such products. On the other hand, activities are primarily grouped together when they share a common process for producing goods or services, using similar technologies; industries differ not just according to products produced but they have specific characteristics, histories and dynamics (Porter, 1979).

Our study will provide both producers and users of statistics with a useful tool for analysing the impact of COVID-19 in the manufacturing industry. The derived tool, a list of COVID-19 related products and economic activities, could be used in different fields both in the administrative and private economy context. More specifically, it could be used to measure the development of specific industrial sectors in times of COVID-19 in different countries thus the policy value of this information would be significant. From the point of view of analysts, such a tool would be useful to explain potential outliers or irregular trends which could have not been predictable.

### 3. The international system of economic classifications

Although a one-to-one correspondence does not exist between products and activities, there is a close relationship between the two that is ensured by their belonging to the international system of economic classifications, an integrated system of statistical classifications (Figure 1), developed mainly under the auspices of the United Nations Statistical Division (UNSD).

Classifications belonging to the system are linked by the structure or by conversion (also known as correspondence, concordance, mapping or correlation) tables. Correspondence tables are produced through the systematic comparison of one classification (A) to another (B) to determine how a statistical unit classified to a detailed category in A should be classified to the most detailed category possible in B (Hoffmann and Chamie, 1999). As presented by Eurostat (2019) they consist in establishing links between the codes in a source classification with the corresponding codes in a target classification.

**Figure 1 – The international system of economic classification**


Source: Eurostat, 2008

The international system of economic classifications is presented in figure 1. Apart from the HS 2017, that has been presented in the background (section 2), the following classifications<sup>2</sup> have been considered in the study.

### 1. Product classifications

- a. The *Central Product Classification (CPC)* constitutes a complete product classification covering goods and services. It serves as an international standard for assembling and tabulating all kinds of data requiring product detail.
- b. The *Statistical Classification of Products by Activity (CPA)* is the European version of the CPC and the purposes it serves are in line with those of the CPC. Although the CPA is the European counterpart of the CPC, it differs from the latter not only in that it is more detailed but also concerning its structuring. The view at European level is that a central product classification should be structured according to the criterion of economic activity, with the framework (and thus the definition of the economic activities) being based on NACE, the Statistical classification of economic activities in the European Community.
- c. The *Prodcom list* is the list of products of the European Community used to provide statistics on the production of manufactured goods. The term comes from the French “PRODUCTION COMMUNAUTAIRE” (Community Production). Prodcom covers mining, quarrying and manufacturing: sections B and C of the NACE. Prodcom statistics aim at providing a full picture at EU level of developments in industrial production for a given product or for an industry in a comparable manner across countries.
- d. The *Combined Nomenclature (CN)* is the goods classification used within the EU for the purposes of foreign trade statistics and for intra-EU trade statistics. It is also used by Directorate General “Taxation and Customs Union” of the European Commission for customs duty purposes.

<sup>2</sup> In general, classifications are revised more or less regularly; the indication after the name or acronym of the classification indicates the version of the classification itself. For instance, HS 2017 means the Harmonised System classification, version 2017.

## 2. Classifications of economic activities

- a. The *International Standard Industrial Classifications of All Economic Activities (ISIC)* is the international reference classification of economic activities. Its main purpose is to provide a set of activity categories that can be utilised for the collection and reporting of statistics according to such activities.
- b. The *Statistical classification of economic activities in the European Community (NACE)* is the classification of economic activities corresponding to ISIC at European level. Though more disaggregated than ISIC, NACE is completely in line with it and can thus be regarded as its European version.
- c. The *Classificazione delle Attività Economiche (Ateco)* is the national version of the NACE classification but is more detailed than the NACE having two more levels. At national level it is used both for statistical and administrative purposes.

## 4. Business statistics and classification systems

In the field of business and economic statistics, classifications play a crucial role both as stratification and dissemination variables. Probably the main and clearest examples to understand the ubiquitous role of the classifications are those concerning economic activities (NACE and Ateco, for the present paper). As national Statistical Business Registers (nSBRs) should be considered as the backbone for business statistics (Unece, 2015), classifying the statistical units according to the economic activity they carry out is certainly one of the main elements that guarantees that role. First of all, the economic activity classifications codes contribute to the coverage of the Registers. Secondly, as stratification variables they help in extracting samples and grossing-up. Thirdly, they can help in defining special statistical units, such as ancillary units. For the above reasons, NACE (or other code of economic activity) is a key variable that allows SBRs to be the backbone of business and economic statistics.

Structural Business Statistics (SBS), for what concerns EU countries, are compiled in modules defined by sectors derived from economic activities codes while indicators within the Short-Term Statistics (STS), such as turnover or prices, are in some cases produced according to the different type of industry.

Concerning the product classifications, Prodcom codes are the units of analysis useful to collect and disseminate data on the physical volume of production sold and the value of production sold during the survey period. Finally, also for trade classifications, it can be noted as classifications such as the CN constitute the central aspect that is collected and disseminated through international trade statistics.

## 5. Data and methods

The lists of COVID-19 related products presented in the informative notes prepared by the WTO and the WCO-WHO constitute the starting point of this research work. In order to consider a set as complete as possible, although not exhaustive as pointed out by the WCO<sup>3</sup>, a total of 165 HS codes have been considered: 3 are cited in all sources, 117 in one document only (respectively 45 have been detected only in the note prepared by the WTO, 72 only by the ones released by the

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<sup>3</sup> As stated in the frontispiece of the document prepared by the WCO: "This list is provided as an indicative list only and only includes a limited number of items. It does not have a legal status".

WCO-WHO). Table 2 presents the number of detected HS codes by source while all HS codes derived by the analysis of the informative notes are listed in Annex 1.

**Table 2 – Number of HS codes by source**

WTO medical supplies and medicines	WCO-WHO medical supplies	WCO-WHO medicines	N. of HS codes
Yes	Yes	Yes	3
Yes	Yes	No	34
Yes	No	No	45
Yes	No	Yes	10
No	Yes	Yes	1
No	Yes	No	39
No	No	Yes	33
			<b>165</b>

Source: Authors' elaboration on the basis of WCO and WTO data, 2020

Through the application of a set of rules derived from both hierarchical relationships and official conversion tables, products have been codified according to other classification systems used at international, European and national level and an attempt to define also related economic activities has been developed. Official conversion tables are made available by the United Nations Statistical Division (UNSD) on its website<sup>4</sup> and by Eurostat directly on RAMON<sup>5</sup>, its classification server.

The following steps have been applied in order to derive different codes according to the above described classifications. Comparisons are always done two at a time, classification A to classification B; the input (or source) classification system is presented on the left while the derived (or target) classification is on the right. Only codes at the highest level of detail have been taken into account.

- a) HS 2017 - CN 2020
- b) CN 2020 - CN 2019
- c) CN 2019 - Prodcom list 2019
- d) CN 2019 - CPA 2.1
- e) CPA 2.1 - NACE Rev.2
- f) NACE Rev. 2 - Ateco 2007
- g) NACE Rev. 2 - ISIC Rev. 4
- h) HS 2017 - CPC 2.1

More specifically, HS 2017 codes have been converted in CN 2020 codes by using the hierarchical relationships between the two classifications (a). CN is an EU further development of international HS system. In fact, CN covers special EU-specific subdivisions (digits 7 and 8) starting from the HS 6-digit level. For this reason, the nature of the links may be (1) “one-to-one”, meaning that the whole content of a position in the source classification corresponds exactly to the whole content of a position in the target classification, or (2) “one-to-many”, meaning in the latter case that the content of a position in the HS 2017 (source classification) is distributed over more than one position in the target classification CN 2020. The objectives of this first step have been three-fold: moving into the European dimension, obtaining more details, and involving a classification (CN) linked to others by direct correspondence tables. Starting from the latest CN version (CN

<sup>4</sup> The UNSD page that contains resources related to classifications on economic statistics is <https://unstats.un.org/unsd/classifications/econ/>

<sup>5</sup> RAMON, Reference And Management Of Nomenclatures, is available at <https://ec.europa.eu/eurostat/ramon>

2020), the obtained codes have been compared with the list of changes (new, deleted or reused codes) that have occurred between the 2019 and 2020 versions of the CN itself; thus, the correspondent list of CN 2019 codes has been derived (b).

The subsequent steps (c and d) take advantage of the correspondence tables available in RAMON. According to step (c), starting from CN 2019 the most updated version and currently used, version of Prodcod has been obtained. Moving from CN 2019 to Prodcod 2019, “many-to-one” links have been tackled since the content of several positions in the CN 2019 is grouped into a single position in the Prodcod 2019.

The derived list of COVID-19 products codified according to the Prodcod list has never been used as an input classification; nevertheless, it has been produced in order to support current economic statistics at national and European level. No further national details of the classification have been found.

The next step (d) has been intended to derive CPA codes; to this aim, after evaluating alternative options, the existing correspondence table between the CN 2019 and the CPA 2.1 was exploited. Prodcod headings are coded using an eight-digit numerical code, the first six digits of which are identical to those of the CPA code. The Prodcod list is therefore also consistent with the CPA, while further detailing the CPA product categories. A detailed analysis has shown that if the conversion had been done by following the structural links, some differences with the first method would have been highlighted. In particular, three cases have been recorded; one of them also generates a change at the level of class (Prodcod code 13.92.29.99 is linked to CPA 32.50.50 rather than to CPA 13.92.29).

Shifting the focus towards economic activities (e), it should be noted that the CPA classification is based on the NACE in the sense that the CPA takes the 4 digits of the NACE and subdivides them into a 5th and 6th digit, thus specifying the products related to the economic activity classified in the NACE. For this reason, the step e) from CPA 2.1 to NACE Rev. 2 has been done in dropping the last two CPA positions.

In a similar way, the national version of the NACE classification is perfectly consistent with the NACE at the level of class, thus, it has been sufficient to link the two standards by NACE codes (f). Ateco 2007 is more detailed than the NACE; as a consequence, it has caused an increase of the total records.

In order to make the results of our analysis be used by a larger audience of users, two more correspondence tables have been applied with the aim of providing data according to the ISIC international classification (g) as well as the CPC (h). Links with the ISIC have been derived by the NACE classification through a bottom-up approach (from the European level to the world level) by using hierarchical links. CPC codes have, instead, been obtained directly from HS codes through the use of the official conversion table made available by the UNSD.

## 6. Results

As already described in the previous section, starting from a list of 165 HS 2017 codes, a complete correspondence table (Annex 2) between products and economic activities presented through different classification systems has been derived. It includes those products and economic activities that are considered to be relevant for the prevention, testing and treatment of COVID-19 in the manufacturing sector, thus offering an almost complete overview of the economic sectors potentially involved in the management of the COVID-19 health emergency.

The output, formed by 674 records, has been derived through a step-by-step logic by integrating a set of correspondence tables between two classifications at a time.

First of all, the 165 HS codes have generated 298 CN 2020 codes (a). For the products under analysis, 79 “one-to-one” and 86 “one-to-many” have been found between HS 2017 and CN 2020. A few differences between the two versions of the Combined Nomenclature (b) have been detect-

ed: they only interest 5 codes that generate many-to-one links in the sense that 12 different CN 2019 codes merge into 5 CN 2020 codes<sup>6</sup>.

159 product codes according to the Prodcod list 2019 have been derived from the CN 2019 (c). Nonetheless, moving from CN 2019 to Prodcod some links were missed; in particular, for the following CN codes no correspondence has been found in the conversion table: 2501 00 10, 8703 21 90, 8703 22 90, 8703 23 90, 8703 24 90, 8703 31 90, 8703 32 90, 8703 33 90, 8703 40 90, 8703 60 90 and 8703 80 90. While the first one, 2501 00 10, identifies “Sea water and salt liquors”, the others all refer to chapter 87 - vehicles other than railway or tramway rolling stock, and parts and accessories thereof, in particular to used motor cars and other motor vehicles principally designed for the transport of persons. In order to have a complete overview of the items involved in the prevention, testing and treatment of the COVID-19 disease, the complete list of the Prodcod codes is provided in Annex 3.

The detected Prodcod codes correspond to 79 CPA (d). For the following 10 CN codes no correspondence has been found in the conversion table: 8703 21 90, 8703 22 90, 8703 23 90, 8703 24 90, 8703 31 90, 8703 32 90, 8703 33 90, 8703 40 90, 8703 60 90 and 8703 80 90.

The 79 CPA codes have generated 32 NACE codes (e) belonging to 16 NACE divisions (2-digit level); see Annex 4 for the complete list.

The 32 NACE classes have developed 59 Ateco categories at the 5th digit level (f); in this way, it has been possible to draw up an inventory of manufacturing economic activities potentially involved in the prevention, testing and treatment of COVID-19 at national level. This goal represents the principal aim of the study.

Moving the attention to the international layer, 24 ISIC (g) and 62 CPC codes (h) have been identified.

A complete overview of the various actions is presented in Table 3.

**Table 3 – Correspondence tables applied in the research work**

Correspondences	N. of records	Derived classification	Number of unique codes
HS 2017	165	-	-
a) HS 2017 - CN 2020	298	CN 2020	298
b) CN 2020 - CN 2019	305	CN 2019	304
c) CN 2019 - Prodcod list 2019	307	Prodcod list 2019	159
d) CN 2019 - CPA 2.1	307	CPA 2.1	79
e) CPA 2.1 - NACE Rev. 2	307	NACE Rev. 2	32
f) NACE Rev. 2 - Ateco 2007	674	Ateco 2007	59
g) NACE Rev. 2 - ISIC Rev. 4	674	ISIC Rev. 4	24
h) HS 2017 - CPC 2.1	674	CPC 2.1	62

Source: Authors' elaboration

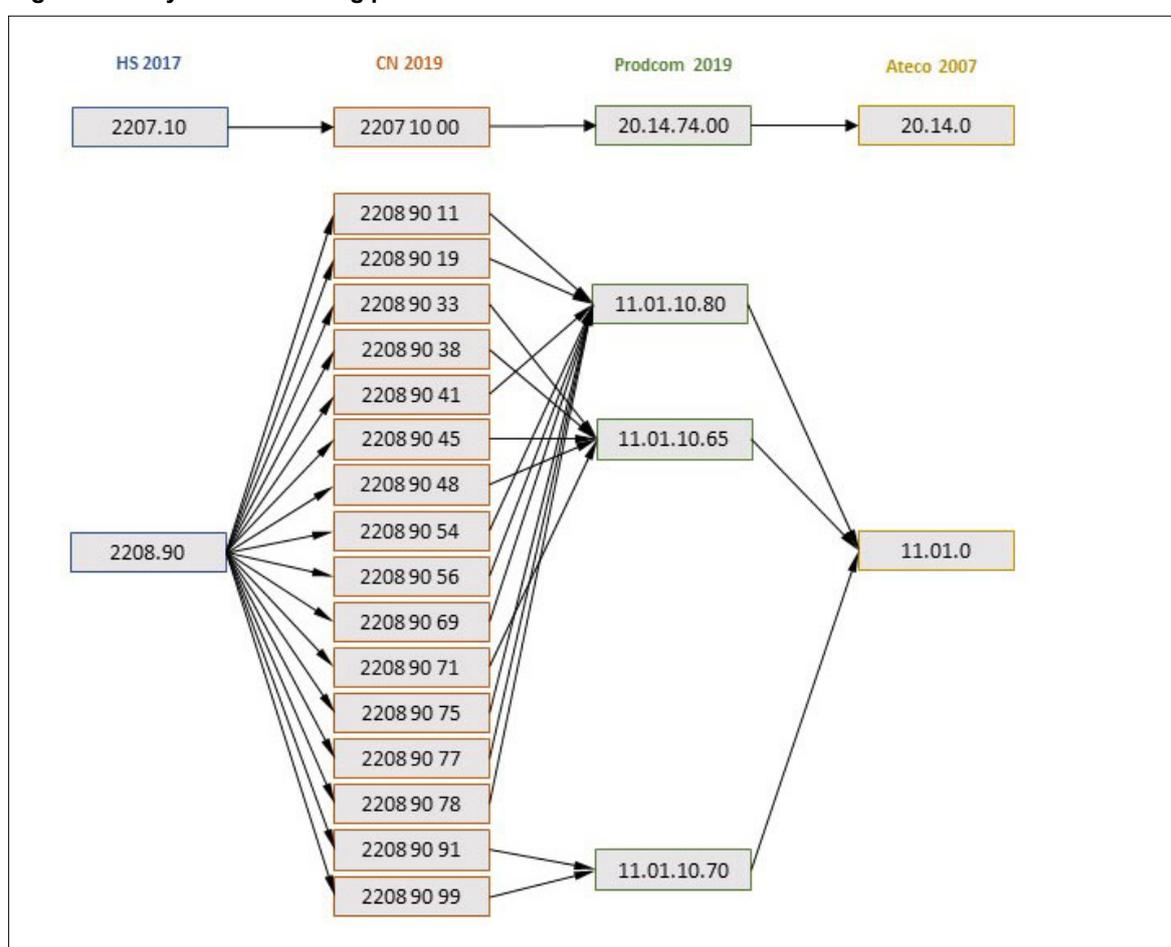
At the end of the procedure, HS 2017 products are generally codified in a single NACE division except for the following four: 2501.00, 3006.10, 3824.99 and 9025.11. In the first case, mining and quarrying sector (division 08) and food manufacturing activities (division 10) are involved. Products related to HS 3006.10 concern pharmaceutical industries (division 20) and other industries (division 32) while in the third both chemical (division 20) and pharmaceutical (division 21) are considered. In the latter case, NACE division 26 (manufacture of computer, electronic and optical products) and 32 (other manufacturing) are involved.

<sup>6</sup> The changes between the CN 2019 and the CN 2020 are the following: 3926 90 92 and 3926 90 97 are merged into 3926 90 97; 9011 10 10 and 9011 10 90 are merged into 9011 10 00; 9025 19 20 and 9025 19 80 are merged into 9025 19 00; 9027 80 11 and 9027 80 99 are merged into 9027 80 20; 9027 80 13, 9027 80 17, 9027 80 91 and 9027 80 99 are merged into 9027 80 80.

The derived correspondence table (Annex 2) between products and economic activities that are considered relevant for the prevention, testing and treatment of the COVID-19 is open to interpretation for several uses and different users. A possible way to analyse its data is by observing the positioning of some specific products. To this aim, some examples are provided below; they are about products that have been frequently cited by the media in the health emergency phase and that have activated more or less significant industrial conversion processes: ethyl alcohol, face masks and gowns.

In the HS 2017 classification ethyl alcohol is identified with two different codes (2207.10 and 2208.90) and the difference is given by the alcoholic strength by volume in relation to the 80% threshold. The types of industry activated by the two codes are very different, the chemical industry (division 20 according to the NACE classification) and the beverage industry (division 11). As shown in Figure 2, some relationships are one to one, such as the link of the product 2207.10 (HS 2017) while others are more complex. For example, HS code 2208.90 has further 16 EU specific subdivisions that correspond to 3 Prodcod 2019 codes (m to n relationships) but, even in this case, only a NACE class and a national fifth-digit level (Ateco 2007) has been involved.

**Figure 2 – Ethyl alcohol: linking products and economic activities**



Source: Authors' elaboration

Among personal protective equipment for the face, masks are certainly the main product that should be considered. They are classified according to the following two HS 2017 codes: 6307.90 identifies textile masks or without a replaceable filter or mechanical parts, and 9020.00 represents those masks with filters or other mechanical parts. These products are potentially related to enterprises operating in the following NACE classes: 13.92 Manufacture of made-up textile articles, ex-

cept apparel; 32.50 Manufacture of medical and dental instruments and supplies; 32.99 Other manufacturing n.e.c. It is important to note that this example contains the codes described in section 5 (step d) for which some differences according to the different conversion method have been found.

Finally, concerning the identification of gowns, the following HS 2017 codes, all related to “protective garments” should be taken into consideration: 3926.20, 4015.90, 4818.50, 6210.10 and 6210.50. Even in this case, different industries are involved: NACE 22.29 Manufacture of other plastic products; 22.19 Manufacture of other rubber products; 17.22 Manufacture of household and sanitary goods and of toilet requisites; 14.19 Manufacture of other wearing apparel and accessories.

## 7. Discussion and conclusions

In the study of economic phenomena, taking all elements into account simultaneously is not always possible. For the purposes of analysis, certain elements need to be chosen and grouped according to particular characteristics (United Nations, 2008). Official statistical classifications are used for this purpose and serve to compare phenomena that otherwise would not be possible to measure.

This research work, inspired by the COVID-19 emergency and the changing business practices in reaction to it, is intended to identify, within the official economic classification systems, the economic activities of the manufacturing sector and the products considered relevant for the prevention of COVID-19 and medical treatment in general. In light of the recent pandemic events the document follows a strict structure as to allow other statisticians to replicate and integrate the analysis; it provides relevant background information, explanation of methods used and the presentation of the results of the study (Annex 2).

The output, a comprehensive correspondence table between codes of different classifications, may be used by researchers and statistical offices to make analysis on the manufacturing sector at the time of COVID-19 disease. Taking into account the fact that the COVID-19 has caused a worldwide emergency, the aim of the study, besides deriving informative systems to be used at national level by Istat, has been intended to provide an almost complete overview of the different classification systems used at international level.

The work, based on three notes prepared by the World Trade Organization and the World Customs Organization in cooperation with the World Health Organization, is the result of the application of a set of official conversion tables and structural links existing between different classifications, or different versions of the same classification; the starting point is the list of products cited in the above international notes.

The output is of a high degree of reliability since it is based on the rigorous application of official correspondence tables and on the respect of hierarchical constraints existing between the different classifications that have been considered in this research work; their being part of an integrated system of economic classifications developed mainly under the auspices of the Statistical Division of the United Nations ensures comparability at world, European and national level of statistics on products and economic activities.

Nevertheless, although product-activity links favoured by the existence of internationally harmonised classifying systems and official conversion tables have been respected, the analysis is affected by the limitations due to the different statistical purposes of classifications of products versus classifications of economic activities. While the former classifications are mainly based on the physical characteristics of the goods produced, the latter group together economic activities when they share a common process for producing goods or services, using similar technologies.

It should be noted that product classifications are more detailed than the classifications of economic activities; thus, they are able to catch changes, that risk to be temporary, in the production processes of small enterprises as well as medium-sized ones. On the other hand, classifications of economic activities are of a great importance because they are used to classify economic units in national Statistical Business Registers (nSBRs). In general, in nSBRs, units are classified according to their principal activity since it is not always possible to define also secondary productions. How-

ever, if it is possible that the COVID-19 disease has made some small and medium enterprises re-convert, even only for a limited period, their production processes, thus implying a change in the activity code registered in nSBRs, this may not be the case for larger companies. In this case, they may have developed some collateral activities by making some minor changes to their processes, but this will not imply a change at the level of ISIC/NACE or Ateco code.

In May 2020, Istat conducted a special survey<sup>7</sup> on a representative sample of enterprises in order to evaluate their current situation and their perspectives concerning COVID-19 health emergency. As far as our purpose is concerned, the results of a specific qualitative question concerning the strategy enterprises have adopted or are about to adopt in a short term offer interesting hints for future research. In fact, results show that 9 per cent of the manufacturing enterprises in the sample have added new products and/or new processes related to COVID-19 emergency but within the industry they currently operate while more than 10 per cent of the enterprises (10.2%) have enlarged their product range within their sector but for production unrelated to the emergency. It is also interesting noting that 0.8 per cent of the manufacturers in the sample have afforded the crisis radically changing their main economic activity; analysing the survey results we are not able to understand in which way they have converted their activities but this could be a possible new field of research. The development of some economic activities as well as the decline of others, despite being not directly related to the COVID-19 emergency, could have been affected by new needs and habits.

Results seem to confirm that most of these changes of activity in some companies are not necessarily definitive but may well be ephemeral, limited to the COVID-19 emergency period. Unfortunately, from a statistical point of view, it is not easy to measure also these temporary changes because they may cause difficulties for the statistical production especially for STS. In effect, at national level, statistics are being produced following the guidelines provided by Eurostat<sup>8</sup>; an example<sup>9</sup> is the “Guidance on estimation and imputation of missing data for short-term statistics in the context of the COVID-19 crisis” which states the following: *“Some statistical units temporarily have taken up alternative activities, e.g. producing disinfectants, protective masks, offering home delivery services. It is not recommended to reclassify them at this point since these will be only temporary activities and might not affect the business structure in the long term. Although information on temporary conversions of businesses will be interesting, STS is not the right statistical domain for this purpose”*. Such methodological solution guarantees the STS domain but at the same time it does not solve the informative gap concerning the development of new products and economic activities emerged during the COVID-19 period.

All the above considered, the output scheme is a useful support for researchers to investigate the evolution of the above cited process of production conversions during the COVID-19 emergency by looking for examples of enterprises that have helped increasing the production of lacking medical products and equipment. At the same time, is it a useful tool for the users of economic statistical classification in finding the most appropriate classification code for products that are necessary for the management of the current emergency and economic activities related to their production (not only staff from nSBRs but also administrative sources which are used as inputs for the nSBRs). In addition, by considering different classification systems, it makes possible to compare statistics produced in different domains such as short-term business statistics or national accounts. The tool could be also particularly useful to introduce additional lenses in analysing international trade statistics in order to evaluate imports and exports comparing data pre-crisis and post-crisis.

In addition to the preliminary results of the special survey conducted by Istat on enterprises facing difficulties derived by COVID-19 health emergency, there is a certain evidence that a lot of national and multinational enterprises, both small and large, have temporarily changed their short-

<sup>7</sup> Istat. 2020. Situazione e prospettive delle imprese nell'emergenza sanitaria COVID-19. Statistiche Report.

<https://www.istat.it/it/archivio/244378>. At the time of writing this paper, the results of the survey had been disseminated in Italian only.

<sup>8</sup> <https://ec.europa.eu/eurostat/data/metadata/covid-19-support-for-statisticians>

<sup>9</sup> [https://ec.europa.eu/eurostat/documents/10186/10693286/Estimation-imputation\\_of\\_missing\\_data\\_for\\_STS.pdf](https://ec.europa.eu/eurostat/documents/10186/10693286/Estimation-imputation_of_missing_data_for_STS.pdf)

term strategies to convert, partially or totally, their production. Such an evidence is provided by leading Italian newspapers in business, financial and regulatory information<sup>10</sup>. What is more, during the emergency, in order to evaluate the proper allocation of their new productions, some enterprises have consulted an early version of our tool, which was made available on the official website of the Italian National Institute of Statistics<sup>11</sup>. In that phase, requests have mainly concerned textile and apparel industries that started to produce face masks and gowns. Later on, in line with the adoption of new Government measures<sup>12</sup> (in force since June 2020) on distillation of wine in case of crisis we will probably support wine-related industries interested in changing the activity codes for their new products (hand sanitizers and ethyl alcohol) since that Italy, as well other European countries, has authorised producers to transform cheaper wines in order to empty the cellars to leave space for the next harvest.

The obtained correspondence table is intended to be maintained regularly as to update official links between products and economic activities that are relevant in the prevention, testing and medical treatment of the COVID-19 pandemic. Such a tool, whose results are freely available in the annexes to this document, could be shared for testing and application in other countries.

Taking into account the most recent developments on the issue, such as the advancements undertaken by the European Commission<sup>13</sup>, an attempt to systematize all latest contributions on economic classifications related to COVID-19 would be desirable at international level as it could provide a more comprehensive picture of all products and economic activities heavily involved in the emergency. In effect, taking into account that the pandemic has spread rapidly around the world, and that we are still in the middle of the crisis and new developments may appear, the potential usefulness of applying a common classification tool internationally to identifying COVID-19 related manufacturing activities should be taken into consideration. Efforts could also be addressed to expand the tool beyond manufacturing, whether this logic is needed.

<sup>10</sup> Some examples are provided in the following articles by IISole24Ore:

- *Cinque imprese del Sud: pronte a convertire le linee per produrre respiratori* (23 March 2020)  
<https://www.ilsole24ore.com/art/cinque-impres-sud-pronte-convertire-linee-produrre-respiratori-AD2W2GF>
- *Mascherine e respiratori, ecco le fabbriche che si riconvertono* (24 March 2020)  
<https://www.ilsole24ore.com/art/da-miroglio-menarini-fabbriche-che-si-riconvertono-contro-coronavirus-ADLIFdD>
- *Dalla grappa agli igienizzanti, l'alcol delle distillerie contro il coronavirus* (24 March 2020)  
<https://www.ilsole24ore.com/art/dalla-grappa-igienizzanti-l-alcol-distillerie-contro-coronavirus-ADnyxMF>
- *Dai motorini dei tergicristalli nascono i respiratori per il Coronavirus* (1 April 2020)  
<https://www.ilsole24ore.com/art/dai-motorini-tergicristalli-nascono-respiratori-il-coronavirus-ADyxqVH>
- *Invitalia, a 50 aziende incentivi alla riconversione per produrre mascherine* (25 April 2020)  
<https://www.ilsole24ore.com/art/invitalia-50-aziende-incentivi-riconversione-produrre-mascherine-ADgh0ZM>

<sup>11</sup> The informative notes used as input sources in this study date back to the end of April 2020 and refer to the most critical time period for the COVID-19 disease in Italy and in the rest of the world. More specifically, this contribution represents a progress of the research work undertaken by the authors on the issue that was based only on the documentation available up to the 3<sup>rd</sup> of April. The work is available at <https://www.istat.it/it/archivio/242495>

<sup>12</sup> Please refer to the following link for more information on the national regulation on distillation of wine in case of crisis <https://www.politicheagricole.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/15714> which is derived from the COMMISSION DELEGATED REGULATION (EU) 2020/592 of 30 April 2020 on temporary exceptional measures derogating from certain provisions of Regulation (EU) No 1308/2013 of the European Parliament and of the Council to address the market disturbance in the fruit and vegetables and wine sectors caused by the COVID-19 pandemic and measures linked to it.

<sup>13</sup> An example is provided by the live document “COVID-19 - Indicative list of products to be imported duty – VAT free” provided by the European Commission (2020).

**Annex 1 - HS 2017 codes used to identify COVID-19 products in the notes prepared by WTO and WCO**

HS 2017	Description	WTO	WCO MS*	WCO M*
2207.10	Undenatured ethyl alcohol, of actual alcoholic strength of >= 80%	Yes	Yes	No
2208.90	Ethyl alcohol of an alcoholic strength of < 80% vol, not denatured; spirits and other spirituous beverages (excl. compound alcoholic preparations of a kind used for the manufacture of beverages, spirits obtained by distilling grape wine or grape marc, whiskies, rum and other spirits obtained by distilling fermented sugar-cane products, gin, geneva, vodka, liqueurs and cordials)	No	Yes	No
2501.00	Salts, incl. table salt and denatured salt, and pure sodium chloride, whether or not in aqueous solution or containing added anti-caking or free-flowing agents; sea water	No	No	Yes
2804.40	Oxygen	No	Yes	Yes
2847.00	Hydrogen peroxide, whether or not solidified with urea	Yes	Yes	No
2907.19	Monophenols (excl. phenol "hydroxybenzene" and its salts, cresols and their salts, octylphenol, nonylphenol and their isomers and salts thereof and naphthols and their salts)	No	No	Yes
2920.90	Esters of inorganic acids of non-metals and their salts; their halogenated, sulphonated, nitrated or nitrosated derivatives (excl. esters of hydrogen halides, phosphoric esters, phosphite esters, and thiophosphoric esters "phosphorothioates", their salts and their halogenated, sulphonated, nitrated or nitrosated derivatives, endosulfan "ISO" and inorganic or organic compounds of mercury)	No	No	Yes
2922.29	Amino-naphthols and other amino-phenols, their ethers and esters; salts thereof (excl. those containing > one kind of oxygen function; aminohydroxynaphthalenesulphonic acids and their salts)	No	No	Yes
2922.50	Amino-alcohol-phenols, amino-acid-phenols and other amino-compounds with oxygen function (excl. amino-alcohols, amino-naphthols and other amino-phenols, their ethers and esters and salts thereof, amino-aldehydes, amino-ketones and amino-quinones, and salts thereof, amino-acids and their esters and salts thereof)	No	No	Yes
2923.90	Quaternary ammonium salts and hydroxides (excl. choline and its salts, tetraethylammonium perfluorooctane sulphonate and didecyltrimethylammonium perfluorooctane sulphonate)	No	No	Yes
2924.29	Cyclic amides, incl. cyclic carbamates, and their derivatives; salts thereof (excl. ureines and their derivatives, salts thereof, 2-acetamidobenzoic acid "N-acetylanthranilic acid" and its salts, ethinamate "INN" and alachlor "ISO")	No	No	Yes
2925.29	Imines and their derivatives; salts thereof (excl. chlordimeform [ISO])	No	No	Yes
2932.19	Heterocyclic compounds with oxygen hetero-atom[s] only, containing an unfused furan ring, whether or not hydrogenated, in the structure (excl. tetrahydrofuran, 2-furaldehyde "furfuraldehyde", furfuryl alcohol, tetrahydrofurfuryl alcohol and sucralose)	No	No	Yes
2933.29	Heterocyclic compounds with nitrogen hetero-atom[s] only, containing an unfused imidazole ring, whether or not hydrogenated, in the structure (excl. hydantoin and its derivatives, and products of subheading 3002 10)	No	No	Yes
2933.33	Alfentanil "INN", anileridine "INN", bezitramide "INN", bromazepam "INN", difenoxin "INN", diphenoxylate "INN", dipipanone "INN", fentanyl "INN", ketobemidone "INN", methylphenidate "INN", pentazocine "INN", pethidine "INN", pethidine "INN" intermediate A, phencyclidine "INN" "PCP", phenoperidine "INN", pipradol "INN", piritramide "INN", propiram "INN" and trimeperidine "INN", and salts thereof	No	No	Yes
2933.39	Heterocyclic compounds with nitrogen hetero-atom[s] only, containing an unfused pyridine ring, whether or not hydrogenated, in the structure (excl. pyridine, piperidine, alfentanil "INN", anileridine "INN", bezitramide "INN", bromazepam "INN", difenoxin "INN", diphenoxylate "INN", dipipanone "INN", fentanyl "INN", ketobemidone "INN", methylphenidate "INN", pentazocine "INN", pethidine "INN", pethidine "INN" intermediate A, phencyclidine "INN" "PCP", phenoperidine "INN", pipradol "INN", piritramide "INN", propiram "INN", trimeperidine "INN", and salts thereof, and inorganic or organic compounds of mercury)	No	No	Yes
2933.49	Heterocyclic compounds with nitrogen hetero-atom[s] only, containing in the structure a quinoline or isoquinoline ring-system, whether or not hydrogenated, but not further fused (excl. levorphanol "INN" and its salts, and inorganic or organic compounds of mercury)	No	No	Yes
2933.59	Heterocyclic compounds with nitrogen hetero-atom[s] only, containing a pyrimidine ring, whether or not hydrogenated, or piperazine ring in the structure (excl. malonylurea "barbituric acid" and its derivatives, allobarbital "INN", amobarbital "INN", barbital "INN", butalbital "INN", butobarbital "INN", cyclobarbital "INN", methylphenobarbital "INN", pentobarbital "INN", phenobarbital "INN", secbutabarbital "INN", secobarbital "INN", vinylbital "INN", loprazolam "INN", mecloqualone "INN", methaqualone "INN" and zipeprol "INN", and salts thereof)	No	No	Yes
2933.79	Lactams (excl. 6-hexanelactam "epsilon-caprolactam", clobazam "INN", methyprylon "INN", and inorganic or organic compounds of mercury)	No	No	Yes
2933.91	Alprazolam "INN", camazepam "INN", chlordiazepoxide "INN", clonazepam "INN", clorazepate, delorazepam "INN", diazepam "INN", estazolam "INN", ethyl loflazepate "INN", fludiazepam "INN", flunitrazepam "INN", flurazepam "INN", halazepam "INN", lorazepam "INN", lormetazepam "INN", mazindol "INN", medazepam "INN", midazolam "INN", nimetazepam "INN", nitrazepam "INN", nordazepam "INN", oxazepam "INN", pinazepam "INN", prazepam "INN", pyrovalerone "INN", temazepam "INN", tetrazepam "INN" and triazolam "INN", and salts thereof	No	No	Yes
2933.99	Heterocyclic compounds with nitrogen hetero-atom[s] only (excl. those containing an unfused pyrazole, imidazole, pyridine or triazine ring, whether or not hydrogenated, a quinoline or isoquinoline ring-system, not further fused, whether or not hydrogenated, a pyrimidine ring, whether or not hydrogenated, or piperazine ring in the structure, and lactams, alprazolam "INN", camazepam "INN", chlordiazepoxide "INN", clonazepam "INN", clorazepate, delorazepam "INN", diazepam "INN", estazolam "INN", ethyl loflazepate "INN", fludiazepam "INN", flunitrazepam "INN", flurazepam "INN", halazepam "INN", lorazepam "INN", lormetazepam "INN", mazindol "INN", medazepam "INN", midazolam "INN", nimetazepam "INN", nitrazepam "INN", nordazepam "INN", oxazepam "INN", pinazepam "INN", prazepam "INN", pyrovalerone "INN", temazepam "INN", tetrazepam "INN" and triazolam "INN", salts thereof and azinphos-methyl "ISO")	No	No	Yes
2934.10	Heterocyclic compounds containing an unfused thiazole ring, whether or not hydrogenated, in the structure	No	No	Yes
2934.30	Heterocyclic compounds containing in the structure a phenothiazine ring-system, whether or not hydrogenated, but not further fused	No	No	Yes

2934.99	Nucleic acids and their salts, whether or not chemically defined; heterocyclic compounds (excl. with oxygen only or with nitrogen hetero-atom[s] only, compounds containing in the structure an unfused thiazole ring or a benzothiazole or phenothiazine ring-system, not further fused and aminorex "INN", brotizolam "INN", clotiazepam "INN", cloxazolam "INN", dextromoramide "INN", haloxazolam "INN", ketazolam "INN", mesocarb "INN", oxazolam "INN", pemoline "INN", phendimetrazine "INN", phenmetrazine "INN", sufentanil "INN", and salts thereof, and inorganic or organic compounds of mercury whether or not chemically defined, and products of 3002 10)	No	No	Yes
2937.19	Polypeptide hormones, protein hormones and glycoprotein hormones, their derivatives and structural analogues, used primarily as hormones (excl. somatropin, its derivatives and structural analogues, and insulin and its salts)	No	No	Yes
2937.21	Cortisone, hydrocortisone, prednisone "dehydrocortisone" and prednisolone "dehydrohydrocortisone"	No	No	Yes
2937.23	Oestrogens and progestogens	No	No	Yes
2937.29	Steroidal hormones, their derivatives and structural analogues, used primarily as hormones (excl. cortisone, hydrocortisone, prednisone "dehydrocortisone", prednisolone "dehydrohydrocortisone", halogenated derivatives of corticosteroidal hormones, oestrogens and progestogens)	No	No	Yes
2937.90	Hormones, natural or reproduced by synthesis; derivatives and structural analogues thereof, used primarily as hormones (excl. polypeptide hormones, protein hormones, glycoprotein hormones, steroidal hormones, catecholamine hormones, prostaglandins, thromboxanes and leukotrienes, their derivatives and structural analogues, and amino-acid derivatives, and products of 3002 10)	No	No	Yes
2939.11	Concentrates of poppy straw; buprenorphine "INN", codeine, dihydrocodeine "INN", ethylmorphine, etorphine "INN", heroin, hydrocodone "INN", hydromorphone "INN", morphine, nicomorphine "INN", oxycodone "INN", oxymorphone "INN", pholcodine "INN", thebacon "INN" and thebaine, and salts thereof	No	No	Yes
2939.19	Alkaloids of opium and their derivatives, and salts thereof (excl. concentrates of poppy straw; buprenorphine "INN", codeine, dihydrocodeine "INN", ethylmorphine, etorphine "INN", heroin, hydrocodone "INN", hydromorphone "INN", morphine, nicomorphine "INN", oxycodone "INN", oxymorphone "INN", pholcodine "INN", thebacon "INN" and thebaine, and salts thereof)	No	No	Yes
2939.79	Vegetable alkaloids, natural or reproduced by synthesis, and their salts, ethers, esters and other derivatives (excl. alkaloids of opium, alkaloids of cinchons, theophylline, aminophylline "theophylline-ethylenediamine" alkaloids of rye ergot and their salts and derivatives, cocaine, ecgonine, levometamfetamine, metamfetamine "INN", metamfetamine racemate, and salts, esters and other derivatives thereof, caffeine and ephedrine, and their salts)	No	No	Yes
2941.10	Penicillins and their derivatives with a penicillanic acid structure; salts thereof	No	No	Yes
2941.30	Tetracyclines and their derivatives; salts thereof	No	No	Yes
2941.40	Chloramphenicol and its derivatives; salts thereof	No	No	Yes
2941.90	Antibiotics (excl. penicillins and their derivatives with a penicillanic acid structure, salts thereof, streptomycins, tetracyclines, chloramphenicol and erythromycin, their derivatives and salts thereof)	No	No	Yes
3001.20	Extracts of glands or other organs or of their secretions, for organo-therapeutic uses	Yes	No	No
3001.90	Dried glands and other organs for organo-therapeutic uses, whether or not powdered; heparin and its salts; other human or animal substances prepared for therapeutic or prophylactic uses, n.e.s.	Yes	No	Yes
3002.12	Antisera and other blood fractions	Yes	No	No
3002.13	Immunological products, unmixed, not put up in measured doses or in forms or packings for retail sale	Yes	No	Yes
3002.14	Immunological products, mixed, not put up in measured doses or in forms or packings for retail sale	Yes	No	No
3002.15	Immunological products, put up in measured doses or in forms or packings for retail sale	Yes	Yes	Yes
3002.19	Immunological products, n.e.s. (code possibly empty, preceding subheadings seem exhaustive)	Yes	No	No
3002.20	Vaccines for human medicine	Yes	No	No
3002.90	Human blood; animal blood prepared for therapeutic, prophylactic or diagnostic uses; toxins, cultures of micro-organisms and similar products (excl. yeasts and vaccines)	Yes	No	No
3003.10	Medicaments containing penicillins or derivatives thereof with a penicillanic acid structure, or streptomycins or derivatives thereof, not in measured doses or put up for retail sale	Yes	No	Yes
3003.20	Medicaments containing antibiotics, not in measured doses or put up for retail sale (excl. medicaments containing penicillins or derivatives thereof with a penicillanic acid structure, or streptomycins or derivatives thereof)	Yes	No	Yes
3003.31	Medicaments containing insulin, not in measured doses or put up for retail sale	Yes	No	No
3003.39	Medicaments containing hormones or steroids used as hormones, not containing antibiotics, not in measured doses or put up for retail sale (excl. those containing insulin)	Yes	No	No
3003.41	Medicaments containing ephedrine or its salts, not containing hormones, steroids used as hormones or antibiotics, not in measured doses or put up for retail sale	Yes	No	No
3003.42	Medicaments containing pseudoephedrine "INN" or its salts, not containing hormones, steroids used as hormones or antibiotics, not in measured doses or put up for retail sale	Yes	No	No
3003.43	Medicaments containing norephedrine or its salts, not containing hormones, steroids used as hormones or antibiotics, not in measured doses or put up for retail sale	Yes	No	No
3003.49	Medicaments containing alkaloids or derivatives thereof, not containing hormones, steroids used as hormones or antibiotics, not in measured doses or put up for retail sale (excl. containing ephedrine, pseudoephedrine "INN", norephedrine or their salts)	Yes	No	No
3003.60	Medicaments containing any of the following antimalarial active principles: artemisinin "INN" for oral ingestion combined with other pharmaceutical active ingredients, or amodiaquine "INN"; artelinic acid or its salts; arteminol "INN"; artemotil "INN"; artemether "INN"; artesunate "INN"; chloroquine "INN"; dihydroartemisinin "INN"; lumefantrine "INN"; mefloquine "INN"; piperazine "INN"; pyrimethamine "INN" or sulfadoxine "INN", not containing hormones, steroids used as hormones or antibiotics, not in measured doses or put up for retail sale	Yes	No	No
3003.90	Medicaments consisting of two or more constituents mixed together for therapeutic or prophylactic uses, not in measured doses or put up for retail sale (excl. antibiotics containing hormones or steroids used as	Yes	No	No

	hormones, but not containing antibiotics, alkaloids or derivatives thereof, hormones, antibiotics, antimalarial active principles or goods of heading 3002, 3005 or 3006)			
3004.10	Medicaments containing penicillins or derivatives thereof with a penicillanic acid structure, or streptomycins or derivatives thereof, put up in measured doses "incl. those for transdermal administration" or in forms or packings for retail sale	Yes	No	Yes
3004.20	Medicaments containing antibiotics, put up in measured doses "incl. those for transdermal administration" or in forms or packings for retail sale (excl. medicaments containing penicillins or derivatives thereof with a penicillanic structure, or streptomycines or derivatives thereof)	Yes	No	Yes
3004.31	Medicaments containing insulin but not antibiotics, put up in measured doses "incl. those for transdermal administration" or in forms or packings for retail sale	Yes	No	No
3004.32	Medicaments containing corticosteroid hormones, their derivatives or structural analogues but not antibiotics, put up in measured doses "incl. those for transdermal administration" or in forms or packings for retail sale	Yes	No	Yes
3004.39	Medicaments containing hormones or steroids used as hormones but not antibiotics, put up in measured doses "incl. those for transdermal administration" or in forms or packings for retail sale (excl. medicaments containing insulin or corticosteroid hormones, their derivatives or structural analogues)	Yes	No	Yes
3004.41	Medicaments containing ephedrine or its salts, not containing hormones, steroids used as hormones or antibiotics, put up in measured doses "incl. those for transdermal administration" or in forms or packings for retail sale	Yes	No	No
3004.42	Medicaments containing pseudoephedrine "INN" or its salts, not containing hormones, steroids used as hormones or antibiotics, put up in measured doses "incl. those for transdermal administration" or in forms or packings for retail sale	Yes	No	No
3004.43	Medicaments containing norephedrine or its salts, not containing hormones, steroids used as hormones or antibiotics, put up in measured doses "incl. those for transdermal administration" or in forms or packings for retail sale	Yes	No	No
3004.49	Medicaments containing alkaloids or derivatives thereof, not containing hormones, steroids used as hormones or antibiotics, put up in measured doses "incl. those for transdermal administration" or in forms or packings for retail sale (excl. containing ephedrine, pseudoephedrine "INN", norephedrine or their salts)	Yes	No	Yes
3004.50	Medicaments containing provitamins, vitamins, incl. natural concentrates and derivatives thereof used primarily as vitamins, put up in measured doses "incl. those for transdermal administration" or in forms or packings for retail sale (excl. containing antibiotics, hormones, alkaloids, or their derivatives)	Yes	No	No
3004.60	Medicaments containing any of the following antimalarial active principles: artemisinin "INN" for oral ingestion combined with other pharmaceutical active ingredients, or amodiaquine "INN"; artelinic acid or its salts; arteminol "INN"; artemotil "INN"; artemether "INN"; artesunate "INN"; chloroquine "INN"; dihydroartemisinin "INN"; lumefantrine "INN"; mefloquine "INN"; piperazine "INN"; pyrimethamine "INN" or sulfadoxine "INN", put up in measured doses "incl. those for transdermal administration" or in forms or packings for retail sale (excl. containing antibiotics, hormones, alkaloids, provitamins, vitamins, or their derivatives)	Yes	No	Yes
3004.90	Medicaments consisting of mixed or unmixed products for therapeutic or prophylactic purposes, put up in measured doses "incl. those for transdermal administration" or in forms or packings for retail sale (excl. containing antibiotics, hormones or steroids used as hormones, alkaloids, provitamins, vitamins, their derivatives or antimalarial active principles)	Yes	Yes	Yes
3005.10	Adhesive dressings and other articles having an adhesive layer, impregnated or covered with pharmaceutical substances or put up for retail sale for medical, surgical, dental or veterinary purposes	Yes	Yes	No
3005.90	Wadding, gauze, bandages and the like, e.g. dressings, adhesive plasters, poultices, impregnated or covered with pharmaceutical substances or put up for retail sale for medical, surgical, dental or veterinary purposes (excl. adhesive dressings and other articles having an adhesive layer)	Yes	Yes	No
3006.10	Sterile surgical catgut, similar sterile suture materials, incl. sterile absorbable surgical or dental yarns, and sterile tissue adhesives for surgical wound closure; sterile laminaria and sterile laminaria tents; sterile absorbable surgical or dental haemostatics; sterile surgical or dental adhesion barriers, whether or not absorbable	Yes	No	No
3006.20	Reagents for determining blood groups or blood factors	Yes	No	No
3006.30	Opacifying preparations for x-ray examinations; diagnostic reagents for administration to patients	Yes	No	No
3006.50	First-aid boxes and kits	Yes	No	No
3006.70	Gel preparations designed to be used in human or veterinary medicine as a lubricant for parts of the body for surgical operations or physical examinations or as a coupling agent between the body and medical instruments	Yes	Yes	No
3401.11	Soap and organic surface-active products and preparations, in the form of bars, cakes, moulded pieces or shapes, and paper, wadding, felt and nonwovens, impregnated, coated or covered with soap or detergent, for toilet use, incl. medicated products	Yes	Yes	No
3401.20	Soap in the form of flakes, granules, powder, paste or in aqueous solution	No	Yes	No
3401.30	Organic surface-active products and preparations for washing the skin, in the form of liquid or cream and put up for retail sale, whether or not containing soap	Yes	Yes	No
3402.12	Cationic organic surface-active agents, whether or not put up for retail sale (excl. soap)	Yes	No	No
3402.13	Non-ionic organic surface-active agents, whether or not put up for retail sale (excl. soap)	Yes	No	No
3402.20	Surface-active preparations, washing preparations, auxiliary washing preparations and cleaning preparations put up for retail sale (excl. organic surface-active agents, soap and organic surface-active preparations in the form of bars, cakes, moulded pieces or shapes, and products and preparations for washing the skin in the form of liquid or cream)	Yes	No	No
3504.00	Peptones and their derivatives; other protein substances and their derivatives, n.e.s.; hide powder, whether or not chromed (excl. organic or inorganic compounds of mercury whether or not chemically defined)	Yes	No	No
3507.90	Enzymes and prepared enzymes, n.e.s. (excl. rennet and concentrates thereof)	Yes	No	No
3701.10	Photographic plates and film in the flat, sensitised, unexposed, for X-ray (excl. of paper, paperboard and textiles)	Yes	Yes	No
3702.10	Photographic film in rolls, unexposed, for X-ray (excl. of paper, paperboard or textiles)	Yes	Yes	No

3808.94	Disinfectants, put up in forms or packings for retail sale or as preparations or articles (excl. goods of sub-heading 3808.59)	Yes	Yes	Yes
3821.00	Prepared culture media for the development or maintenance of micro-organisms "incl. viruses and the like" or of plant, human or animal cells	Yes	Yes	No
3822.00	Diagnostic or laboratory reagents on a backing, prepared diagnostic or laboratory reagents whether or not on a backing, and certified reference materials (excl. compound diagnostic reagents designed to be administered to the patient, blood-grouping reagents, animal blood prepared for therapeutic, prophylactic or diagnostic uses and vaccines, toxins, cultures of micro-organisms and similar products)	Yes	Yes	No
3824.99	Chemical products and preparations of the chemical or allied industries, incl. those consisting of mixtures of natural products, n.e.s.	Yes	No	No
3905.99	Polymers of vinyl esters and other vinyl polymers, in primary forms (excl. those of vinyl chloride or other halogenated olefins, poly"vinyl acetate", vinyl acetate copolymers and poly"vinyl alcohol", whether or not containing unhydrolysed acetate groups)	No	No	Yes
3923.29	Articles for the conveyance or packaging of goods, of plastics (excl. boxes, cases, crates and similar articles; sacks and bags, incl. cones; carboys, bottles, flasks and similar articles; spools, spindles, bobbins and similar supports; stoppers, lids, caps and other closures)	No	Yes	No
3926.20	Articles of apparel and clothing accessories produced by the stitching or sticking together of plastic sheeting, incl. gloves, mittens and mitts (excl. goods of 9619)	Yes	Yes	No
3926.90	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s (excl. goods of 9619)	Yes	Yes	No
4014.90	Hygienic or pharmaceutical articles, incl. teats, of vulcanised rubber (excl. hard rubber), with or without fittings of hard rubber, n.e.s. (excl. sheath contraceptives and articles of apparel and clothing accessories, incl. gloves, for all purposes)	Yes	No	No
4015.11	Surgical gloves, of vulcanised rubber (excl. fingerstalls)	Yes	Yes	No
4015.19	Gloves, mittens and mitts, of vulcanised rubber (excl. surgical gloves)	Yes	Yes	No
4015.90	Articles of apparel and clothing accessories, for all purposes, of vulcanised rubber (excl. hard rubber and footwear and headgear and parts thereof, and gloves, mittens and mitts)	No	Yes	No
4818.50	Articles of apparel and clothing accessories, of paper pulp, paper, cellulose wadding or webs of cellulose fibres (excl. footwear and parts thereof, incl. insoles, heel pieces and similar removable products, gaiters and similar products, headgear and parts thereof)	No	Yes	No
4818.90	Paper, cellulose wadding or webs of cellulose fibres, of a kind used for household or sanitary purposes, in rolls of a width $\leq 36$ cm, or cut to size or shape; articles of paper pulp, paper, cellulose wadding or webs of cellulose fibres for household, sanitary or hospital use (excl. toilet paper, handkerchiefs, cleansing or facial tissues and towels, tablecloths, serviettes, sanitary towels and tampons, napkins and napkin liners for babies and similar sanitary articles)	No	Yes	No
6116.10	Gloves, mittens and mitts, impregnated, coated or covered with plastics or rubber, knitted or crocheted	No	Yes	No
6210.10	Garments made up of felt or nonwovens, whether or not impregnated, coated, covered or laminated (excl. babies' garments and clothing accessories)	No	Yes	No
6210.40	Men's or boys' garments of textile fabrics, rubberised or impregnated, coated, covered or laminated with plastics or other substances (excl. of the type described in subheading 6201,11 to 6201,19, and babies' garments and clothing accessories)	No	Yes	No
6210.50	Women's or girls' garments of textile fabrics, rubberised or impregnated, coated, covered or laminated with plastics or other substances (excl. of the type described in subheading 6202,11 to 6202,19, and babies' garments and clothing accessories)	No	Yes	No
6216.00	Gloves, mittens and mitts, of all types of textile materials (excl. knitted or crocheted and for babies)	No	Yes	No
6307.90	Made-up articles of textile materials, incl. dress patterns, n.e.s.	Yes	Yes	No
6505.00	Hats and other headgear, knitted or crocheted, or made up from lace, felt or other textile fabric, in the piece (but not in strips), whether or not lined or trimmed; hairnets of any material, whether or not lined or trimmed (excl. headgear for animals, and toy and carnival headgear)	No	Yes	No
7017.10	Laboratory, hygienic or pharmaceutical glassware, whether or not graduated or calibrated, of fused quartz or other fused silica (excl. containers for the conveyance or packing of goods, measuring, checking or medical instruments and apparatus of chapter 90)	Yes	No	No
7017.20	Laboratory, hygienic or pharmaceutical glassware, whether or not graduated or calibrated, having a linear coefficient of expansion $\leq 5 \times 10^{-6}$ per kelvin within a temperature range of 0°C to 300°C (excl. glass of fused quartz or other fused silica, containers for the conveyance or packing of goods, measuring, checking or medical instruments and apparatus of chapter 90)	Yes	No	No
7017.90	Laboratory, hygienic or pharmaceutical glassware, whether or not graduated or calibrated (excl. glass having a linear coefficient of expansion $\leq 5 \times 10^{-6}$ per kelvin within a temperature range of 0°C to 300°C or of fused quartz or other fused silica, containers for the conveyance or packing of goods, measuring, checking or medical instruments and apparatus of chapter 90)	Yes	No	No
7311.00	Containers of iron or steel, for compressed or liquefied gas (excl. containers specifically constructed or equipped for one or more types of transport)	No	Yes	No
7324.90	Sanitary ware, incl. parts thereof (excl. cans, boxes and similar containers of heading 7310, small wall cabinets for medical supplies or toilettries and other furniture of chapter 94, and fittings, complete sinks and washbasins, of stainless steel, complete baths and fittings)	No	Yes	No
7613.00	Aluminium containers for compressed or liquefied gas	No	Yes	No
8413.19	Pumps for liquids, fitted or designed to be fitted with a measuring device (excl. pumps for dispensing fuel or lubricants, of the type used in filling stations or in garages)	No	Yes	No
8419.20	Medical, surgical or laboratory sterilizers	Yes	Yes	No
8421.39	Machinery and apparatus for filtering or purifying gases (excl. isotope separators and intake air filters for internal combustion engines)	No	Yes	No
8703.10	Vehicles for the transport of <10 persons on snow; golf cars and similar vehicles	No	Yes	No
8703.21	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with only spark-ignition internal combustion reciprocating piston engine of a cylinder capacity $\leq 1.000$ cm <sup>3</sup> (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)	No	Yes	No

8703.22	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with only spark-ignition internal combustion reciprocating piston engine of a cylinder capacity > 1.000 cm <sup>3</sup> but <= 1.500 cm <sup>3</sup> (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)	No	Yes	No
8703.23	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with only spark-ignition internal combustion reciprocating piston engine of a cylinder capacity > 1.500 cm <sup>3</sup> but <= 3.000 cm <sup>3</sup> (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)	No	Yes	No
8703.24	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with only spark-ignition internal combustion reciprocating piston engine of a cylinder capacity > 3.000 cm <sup>3</sup> (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)	No	Yes	No
8703.31	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with only diesel engine of a cylinder capacity <= 1.500 cm <sup>3</sup> (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)	No	Yes	No
8703.32	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with only diesel engine of a cylinder capacity > 1.500 cm <sup>3</sup> but <= 2.500 cm <sup>3</sup> (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)	No	Yes	No
8703.33	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with only diesel engine of a cylinder capacity > 2.500 cm <sup>3</sup> (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)	No	Yes	No
8703.40	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with both spark-ignition internal combustion reciprocating piston engine and electric motor as motors for propulsion (excl. vehicles for travelling on snow, other specially designed vehicles of subheading 8703.10 and plug-in hybrids)	No	Yes	No
8703.50	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with both diesel engine and electric motor as motors for propulsion (excl. vehicles for travelling on snow, other specially designed vehicles of subheading 8703.10 and plug-in hybrids)	No	Yes	No
8703.60	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with both spark-ignition internal combustion reciprocating piston engine and electric motor as motors for propulsion, capable of being charged by plugging to external source of electric power (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)	No	Yes	No
8703.70	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with both diesel engine and electric motor as motors for propulsion, capable of being charged by plugging to external source of electric power (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)	No	Yes	No
8703.80	Motor cars and other motor vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with only electric motor for propulsion (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)	No	Yes	No
8703.90	Motor cars and other vehicles principally designed for the transport of <10 persons, incl. station wagons and racing cars, with engines other than internal combustion piston engine or electric motor (excl. vehicles for the transport of persons on snow and other specially designed vehicles of subheading 8703.10)	No	Yes	No
8705.90	Special purpose motor vehicles (other than those principally designed for the transport of persons or goods and excl. concrete-mixer lorries, fire fighting vehicles, mobile drilling derricks and crane lorries)	No	Yes	No
8713.10	Carriages for disabled persons, not mechanically propelled	No	Yes	No
8713.90	Carriages for disabled persons, motorised or otherwise mechanically propelled (excl. specially designed motor vehicles and bicycles)	No	Yes	No
9004.90	Spectacles, goggles and the like, corrective, protective or other (excl. spectacles for testing eyesight, sunglasses, contact lenses, spectacle lenses and frames and mountings for spectacles)	Yes	Yes	No
9010.50	Apparatus and equipment for photographic or cinematographic laboratories, n.e.s.; negatoscopes	Yes	No	No
9011.10	Stereoscopic optical microscopes	Yes	No	No
9011.80	Optical microscopes (excl. for photomicrography, cinephotomicrography or microprojection, stereoscopic microscopes, binocular microscopes for ophthalmology and instruments, appliances and machines of heading 9031)	Yes	No	No
9018.11	Electro-cardiographs	Yes	Yes	No
9018.12	Ultrasonic scanning apparatus	Yes	Yes	No
9018.13	Magnetic resonance imaging apparatus	Yes	Yes	No
9018.14	Scintigraphic apparatus	Yes	Yes	No
9018.19	Electro-diagnostic apparatus, incl. apparatus for functional exploratory examination or for checking physiological parameters (excl. electro-cardiographs, ultrasonic scanning apparatus, magnetic resonance imaging apparatus and scintigraphic apparatus)	Yes	Yes	No
9018.20	Ultraviolet or infra-red ray apparatus used in medical, surgical, dental or veterinary sciences	Yes	Yes	No
9018.31	Syringes, with or without needles, used in medical, surgical, dental or veterinary sciences	Yes	Yes	No
9018.32	Tubular metal needles and needles for sutures, used in medical, surgical, dental or veterinary sciences	Yes	Yes	No
9018.39	Needles, catheters, cannulae and the like, used in medical, surgical, dental or veterinary sciences (excl. syringes, tubular metal needles and needles for sutures)	Yes	Yes	No
9018.41	Dental drill engines, whether or not combined on a single base with other dental equipment	No	Yes	No
9018.49	Instruments and appliances used in dental sciences, n.e.s.	No	Yes	No
9018.50	Ophthalmic instruments and appliances, n.e.s.	No	Yes	No
9018.90	Instruments and appliances used in medical, surgical or veterinary sciences, n.e.s.	Yes	Yes	No

9019.20	Ozone therapy, oxygen therapy, aerosol therapy, artificial respiration or other therapeutic respiration apparatus	Yes	Yes	No
9020.00	Breathing appliances and gas masks (excl. protective masks having neither mechanical parts nor replaceable filters, and artificial respiration or other therapeutic respiration apparatus)	Yes	Yes	No
9021.50	Pacemakers for stimulating heart muscles (excl. parts and accessories)	Yes	No	No
9022.12	Computer tomography apparatus	Yes	Yes	No
9022.14	Apparatus based on the use of X-rays, for medical, surgical or veterinary uses (excl. for dental purposes and computer tomography apparatus)	Yes	No	No
9022.19	Apparatus based on the use of X-rays (other than for medical, surgical, dental or veterinary uses)	Yes	No	No
9022.21	Apparatus based on the use of alpha, beta or gamma radiations, for medical, surgical, dental or veterinary uses	Yes	No	No
9022.29	Apparatus based on the use of alpha, beta or gamma radiations (other than for medical, surgical, dental or veterinary uses)	Yes	No	No
9022.30	X-ray tubes	Yes	No	No
9022.90	X-ray generators other than X-ray tubes, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like, and general parts and accessories for apparatus of heading 9022, n.e.s.	Yes	No	No
9025.11	Thermometers, liquid-filled, for direct reading, not combined with other instruments	Yes	No	No
9025.19	Thermometers and pyrometers, not combined with other instruments (excl. liquid-filled thermometers for direct reading)	Yes	Yes	No
9026.80	Instruments or apparatus for measuring or checking variables of liquids or gases, n.e.s.	No	Yes	No
9027.80	Instruments and apparatus for physical or chemical analysis, or for measuring or checking viscosity, porosity, expansion, surface tension or the like, or for measuring or checking quantities of heat, sound or light, n.e.s.	Yes	Yes	No
9028.20	Liquid meters, incl. calibrating meters therefor	No	Yes	No
9030.20	Oscilloscopes and oscillographs	Yes	No	No
9402.90	Operating tables, examination tables, and other medical, dental, surgical or veterinary furniture (excl. dentists' or similar chairs, special tables for X-ray examination, and stretchers and litters, incl. trolley-stretchers)	Yes	Yes	No

Source: Authors' elaboration on the basis of WCO and WTO data, 2020

(\*) WCO MS = WCO medical supplies and WCO M = WCO medicines.

**Annex 2 - Correspondence table between COVID-19 products and economic activities**

HS 2017	CN 2020	CN 2019	Prodcom 2019	CPA 2.1	NACE Rev. 2	Ateco 2007	ISIC Rev. 4	CPC 2.1
2207.10	2207 10 00	2207 10 00	20.14.74.00	20.14.74	20.14	20.14.0	2011	24110
2208.90	2208 90 11	2208 90 11	11.01.10.80	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 19	2208 90 19	11.01.10.80	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 33	2208 90 33	11.01.10.65	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 38	2208 90 38	11.01.10.65	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 41	2208 90 41	11.01.10.80	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 45	2208 90 45	11.01.10.65	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 48	2208 90 48	11.01.10.65	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 54	2208 90 54	11.01.10.80	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 56	2208 90 56	11.01.10.80	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 69	2208 90 69	11.01.10.80	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 71	2208 90 71	11.01.10.65	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 75	2208 90 75	11.01.10.80	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 77	2208 90 77	11.01.10.80	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 78	2208 90 78	11.01.10.80	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 91	2208 90 91	11.01.10.70	11.01.10	11.01	11.01.0	1101	24139
2208.90	2208 90 99	2208 90 99	11.01.10.70	11.01.10	11.01	11.01.0	1101	24139
2501.00	2501 00 10	2501 00 10		08.93.10	08.93	08.93.0	0893	16200
2501.00	2501 00 31	2501 00 31	08.93.10.00	08.93.10	08.93	08.93.0	0893	16200
2501.00	2501 00 51	2501 00 51	08.93.10.00	08.93.10	08.93	08.93.0	0893	16200
2501.00	2501 00 91	2501 00 91	10.84.30.00	10.84.30	10.84	10.84.0	1079	16200
2501.00	2501 00 99	2501 00 99	08.93.10.00	08.93.10	08.93	08.93.0	0893	16200
2804.40	2804 40 00	2804 40 00	20.11.11.70	20.11.11	20.11	20.11.0	2011	34210
2847.00	2847 00 00	2847 00 00	20.13.63.00	20.13.63	20.13	20.13.0	2011	34280
2907.19	2907 19 10	2907 19 10	20.14.24.10	20.14.24	20.14	20.14.0	2011	34139
2907.19	2907 19 90	2907 19 90	20.14.24.10	20.14.24	20.14	20.14.0	2011	34139
2920.90	2920 90 10	2920 90 10	20.14.53.80	20.14.53	20.14	20.14.0	2011	34180
2920.90	2920 90 70	2920 90 70	20.14.53.80	20.14.53	20.14	20.14.0	2011	34180
2922.29	2922 29 00	2922 29 00	20.14.42.90	20.14.42	20.14	20.14.0	2011	34150
2922.50	2922 50 00	2922 50 00	20.14.42.90	20.14.42	20.14	20.14.0	2011	34150
2923.90	2923 90 00	2923 90 00	21.10.20.40	21.10.20	21.10	21.10.0	2100	35220
2924.29	2924 29 10	2924 29 10	21.10.20.70	21.10.20	21.10	21.10.0	2100	35220
2924.29	2924 29 70	2924 29 70	21.10.20.70	21.10.20	21.10	21.10.0	2100	35220
2925.29	2925 29 00	2925 29 00	20.14.43.40	20.14.43	20.14	20.14.0	2011	34150
2932.19	2932 19 00	2932 19 00	20.14.52.25	20.14.52	20.14	20.14.0	2011	34160
2933.29	2933 29 10	2933 29 10	20.14.52.30	20.14.52	20.14	20.14.0	2011	34160
2933.29	2933 29 90	2933 29 90	20.14.52.30	20.14.52	20.14	20.14.0	2011	34160
2933.33	2933 33 00	2933 33 00	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.39	2933 39 10	2933 39 10	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.39	2933 39 20	2933 39 20	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.39	2933 39 25	2933 39 25	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.39	2933 39 35	2933 39 35	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160

2933.39	2933 39 40	2933 39 40	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.39	2933 39 45	2933 39 45	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.39	2933 39 50	2933 39 50	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.39	2933 39 55	2933 39 55	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.39	2933 39 99	2933 39 99	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.49	2933 49 10	2933 49 10	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.49	2933 49 30	2933 49 30	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.49	2933 49 90	2933 49 90	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.59	2933 59 10	2933 59 10	21.10.31.59	21.10.31	21.10	21.10.0	2100	35230
2933.59	2933 59 20	2933 59 20	21.10.31.59	21.10.31	21.10	21.10.0	2100	35230
2933.59	2933 59 95	2933 59 95	21.10.31.59	21.10.31	21.10	21.10.0	2100	35230
2933.79	2933 79 00	2933 79 00	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.91	2933 91 10	2933 91 10	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.91	2933 91 90	2933 91 90	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.99	2933 99 20	2933 99 20	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.99	2933 99 50	2933 99 50	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2933.99	2933 99 80	2933 99 80	20.14.52.80	20.14.52	20.14	20.14.0	2011	34160
2934.10	2934 10 00	2934 10 00	20.14.52.90	20.14.52	20.14	20.14.0	2011	34160
2934.30	2934 30 10	2934 30 10	21.10.31.80	21.10.31	21.10	21.10.0	2100	35230
2934.30	2934 30 90	2934 30 90	21.10.31.80	21.10.31	21.10	21.10.0	2100	35230
2934.99	2934 99 60	2934 99 60	20.14.52.90	20.14.52	20.14	20.14.0	2011	34160
2934.99	2934 99 90	2934 99 90	20.14.52.90	20.14.52	20.14	20.14.0	2011	34160
2937.19	2937 19 00	2937 19 00	21.10.52.00	21.10.52	21.10	21.10.0	2100	35250
2937.21	2937 21 00	2937 21 00	21.10.52.00	21.10.52	21.10	21.10.0	2100	35250
2937.23	2937 23 00	2937 23 00	21.10.52.00	21.10.52	21.10	21.10.0	2100	35250
2937.29	2937 29 00	2937 29 00	21.10.52.00	21.10.52	21.10	21.10.0	2100	35250
2937.90	2937 90 00	2937 90 00	21.10.52.00	21.10.52	21.10	21.10.0	2100	35250
2939.11	2939 11 00	2939 11 00	21.10.53.00	21.10.53	21.10	21.10.0	2100	35250
2939.19	2939 19 00	2939 19 00	21.10.53.00	21.10.53	21.10	21.10.0	2100	35250
2939.79	2939 79 10	2939 79 10	21.10.53.00	21.10.53	21.10	21.10.0	2100	35250
2939.79	2939 79 90	2939 79 90	21.10.53.00	21.10.53	21.10	21.10.0	2100	35250
2941.10	2941 10 00	2941 10 00	21.10.54.00	21.10.54	21.10	21.10.0	2100	35250
2941.30	2941 30 00	2941 30 00	21.10.54.00	21.10.54	21.10	21.10.0	2100	35250
2941.40	2941 40 00	2941 40 00	21.10.54.00	21.10.54	21.10	21.10.0	2100	35250
2941.90	2941 90 00	2941 90 00	21.10.54.00	21.10.54	21.10	21.10.0	2100	35250
3001.20	3001 20 10	3001 20 10	21.10.60.20	21.10.60	21.10	21.10.0	2100	35270
3001.20	3001 20 90	3001 20 90	21.10.60.20	21.10.60	21.10	21.10.0	2100	35270
3001.90	3001 90 20	3001 90 20	21.10.60.40	21.10.60	21.10	21.10.0	2100	35270
3001.90	3001 90 91	3001 90 91	21.10.60.40	21.10.60	21.10	21.10.0	2100	35270
3001.90	3001 90 98	3001 90 98	21.10.60.40	21.10.60	21.10	21.10.0	2100	35270
3002.12	3002 12 00	3002 12 00	21.20.21.25	21.20.21	21.20	21.20.0	2100	35270
3002.13	3002 13 00	3002 13 00	21.20.21.25	21.20.21	21.20	21.20.0	2100	35270
3002.14	3002 14 00	3002 14 00	21.20.21.25	21.20.21	21.20	21.20.0	2100	35270
3002.15	3002 15 00	3002 15 00	21.20.21.25	21.20.21	21.20	21.20.0	2100	35270
3002.19	3002 19 00	3002 19 00	21.20.21.25	21.20.21	21.20	21.20.0	2100	35270
3002.20	3002 20 00	3002 20 00	21.20.21.45	21.20.21	21.20	21.20.0	2100	35270

3002.90	3002 90 10	3002 90 10	21.10.60.55	21.10.60	21.10	21.10.0	2100	35270
3002.90	3002 90 30	3002 90 30	21.10.60.55	21.10.60	21.10	21.10.0	2100	35270
3002.90	3002 90 50	3002 90 50	21.10.60.55	21.10.60	21.10	21.10.0	2100	35270
3002.90	3002 90 90	3002 90 90	21.10.60.55	21.10.60	21.10	21.10.0	2100	35270
3003.10	3003 10 00	3003 10 00	21.20.11.30	21.20.11	21.20	21.20.0	2100	35260
3003.20	3003 20 00	3003 20 00	21.20.11.50	21.20.11	21.20	21.20.0	2100	35260
3003.31	3003 31 00	3003 31 00	21.20.12.30	21.20.12	21.20	21.20.0	2100	35260
3003.39	3003 39 00	3003 39 00	21.20.12.50	21.20.12	21.20	21.20.0	2100	35260
3003.41	3003 41 00	3003 41 00	21.20.13.10	21.20.13	21.20	21.20.0	2100	35260
3003.42	3003 42 00	3003 42 00	21.20.13.10	21.20.13	21.20	21.20.0	2100	35260
3003.43	3003 43 00	3003 43 00	21.20.13.10	21.20.13	21.20	21.20.0	2100	35260
3003.49	3003 49 00	3003 49 00	21.20.13.10	21.20.13	21.20	21.20.0	2100	35260
3003.60	3003 60 00	3003 60 00	21.20.13.20	21.20.13	21.20	21.20.0	2100	35260
3003.90	3003 90 00	3003 90 00	21.20.13.20	21.20.13	21.20	21.20.0	2100	35260
3004.10	3004 10 00	3004 10 00	21.20.11.60	21.20.11	21.20	21.20.0	2100	35260
3004.20	3004 20 00	3004 20 00	21.20.11.80	21.20.11	21.20	21.20.0	2100	35260
3004.31	3004 31 00	3004 31 00	21.20.12.60	21.20.12	21.20	21.20.0	2100	35260
3004.32	3004 32 00	3004 32 00	21.20.12.70	21.20.12	21.20	21.20.0	2100	35260
3004.39	3004 39 00	3004 39 00	21.20.12.70	21.20.12	21.20	21.20.0	2100	35260
3004.41	3004 41 00	3004 41 00	21.20.13.40	21.20.13	21.20	21.20.0	2100	35260
3004.42	3004 42 00	3004 42 00	21.20.13.40	21.20.13	21.20	21.20.0	2100	35260
3004.43	3004 43 00	3004 43 00	21.20.13.40	21.20.13	21.20	21.20.0	2100	35260
3004.49	3004 49 00	3004 49 00	21.20.13.40	21.20.13	21.20	21.20.0	2100	35260
3004.50	3004 50 00	3004 50 00	21.20.13.60	21.20.13	21.20	21.20.0	2100	35260
3004.60	3004 60 00	3004 60 00	21.20.13.80	21.20.13	21.20	21.20.0	2100	35260
3004.90	3004 90 00	3004 90 00	21.20.13.80	21.20.13	21.20	21.20.0	2100	35260
3005.10	3005 10 00	3005 10 00	21.20.24.20	21.20.24	21.20	21.20.0	2100	35270
3005.90	3005 90 10	3005 90 10	21.20.24.40	21.20.24	21.20	21.20.0	2100	35270
3005.90	3005 90 31	3005 90 31	21.20.24.40	21.20.24	21.20	21.20.0	2100	35270
3005.90	3005 90 50	3005 90 50	21.20.24.40	21.20.24	21.20	21.20.0	2100	35270
3005.90	3005 90 99	3005 90 99	21.20.24.40	21.20.24	21.20	21.20.0	2100	35270
3006.10	3006 10 10	3006 10 10	21.20.24.30	21.20.24	21.20	21.20.0	2100	35290
3006.10	3006 10 30	3006 10 30	32.50.50.30	32.50.50	32.50	32.50.1	3250	35290
3006.10	3006 10 30	3006 10 30	32.50.50.30	32.50.50	32.50	32.50.2	3250	35290
3006.10	3006 10 30	3006 10 30	32.50.50.30	32.50.50	32.50	32.50.3	3250	35290
3006.10	3006 10 30	3006 10 30	32.50.50.30	32.50.50	32.50	32.50.4	3250	35290
3006.10	3006 10 30	3006 10 30	32.50.50.30	32.50.50	32.50	32.50.5	3250	35290
3006.10	3006 10 90	3006 10 90	32.50.50.30	32.50.50	32.50	32.50.1	3250	35290
3006.10	3006 10 90	3006 10 90	32.50.50.30	32.50.50	32.50	32.50.2	3250	35290
3006.10	3006 10 90	3006 10 90	32.50.50.30	32.50.50	32.50	32.50.3	3250	35290
3006.10	3006 10 90	3006 10 90	32.50.50.30	32.50.50	32.50	32.50.4	3250	35290
3006.10	3006 10 90	3006 10 90	32.50.50.30	32.50.50	32.50	32.50.5	3250	35290
3006.20	3006 20 00	3006 20 00	21.20.23.20	21.20.23	21.20	21.20.0	2100	35270
3006.30	3006 30 00	3006 30 00	21.20.23.40	21.20.23	21.20	21.20.0	2100	35270
3006.50	3006 50 00	3006 50 00	21.20.24.60	21.20.24	21.20	21.20.0	2100	35290
3006.70	3006 70 00	3006 70 00	32.50.50.20	32.50.50	32.50	32.50.1	3250	35290

3006.70	3006 70 00	3006 70 00	32.50.50.20	32.50.50	32.50	32.50.2	3250	35290
3006.70	3006 70 00	3006 70 00	32.50.50.20	32.50.50	32.50	32.50.3	3250	35290
3006.70	3006 70 00	3006 70 00	32.50.50.20	32.50.50	32.50	32.50.4	3250	35290
3006.70	3006 70 00	3006 70 00	32.50.50.20	32.50.50	32.50	32.50.5	3250	35290
3401.11	3401 11 00	3401 11 00	20.42.19.15	20.42.19	20.42	20.42.0	2023	35321
3401.20	3401 20 10	3401 20 10	20.41.31.50	20.41.31	20.41	20.41.1	2023	35321
3401.20	3401 20 10	3401 20 10	20.41.31.50	20.41.31	20.41	20.41.2	2023	35321
3401.20	3401 20 90	3401 20 90	20.41.31.80	20.41.31	20.41	20.41.1	2023	35321
3401.20	3401 20 90	3401 20 90	20.41.31.80	20.41.31	20.41	20.41.2	2023	35321
3401.30	3401 30 00	3401 30 00	20.42.19.30	20.42.19	20.42	20.42.0	2023	35321
3402.12	3402 12 00	3402 12 00	20.41.20.30	20.41.20	20.41	20.41.1	2023	35310
3402.12	3402 12 00	3402 12 00	20.41.20.30	20.41.20	20.41	20.41.2	2023	35310
3402.13	3402 13 00	3402 13 00	20.41.20.50	20.41.20	20.41	20.41.1	2023	35310
3402.13	3402 13 00	3402 13 00	20.41.20.50	20.41.20	20.41	20.41.2	2023	35310
3402.20	3402 20 20	3402 20 20	20.41.32.40	20.41.32	20.41	20.41.1	2023	35322
3402.20	3402 20 20	3402 20 20	20.41.32.40	20.41.32	20.41	20.41.2	2023	35322
3402.20	3402 20 90	3402 20 90	20.41.32.50	20.41.32	20.41	20.41.1	2023	35322
3402.20	3402 20 90	3402 20 90	20.41.32.50	20.41.32	20.41	20.41.2	2023	35322
3504.00	3504 00 10	3504 00 10	20.59.51.00	20.59.51	20.59	20.59.1	2029	35420
3504.00	3504 00 10	3504 00 10	20.59.51.00	20.59.51	20.59	20.59.2	2029	35420
3504.00	3504 00 10	3504 00 10	20.59.51.00	20.59.51	20.59	20.59.3	2029	35420
3504.00	3504 00 10	3504 00 10	20.59.51.00	20.59.51	20.59	20.59.4	2029	35420
3504.00	3504 00 10	3504 00 10	20.59.51.00	20.59.51	20.59	20.59.5	2029	35420
3504.00	3504 00 10	3504 00 10	20.59.51.00	20.59.51	20.59	20.59.6	2029	35420
3504.00	3504 00 10	3504 00 10	20.59.51.00	20.59.51	20.59	20.59.7	2029	35420
3504.00	3504 00 10	3504 00 10	20.59.51.00	20.59.51	20.59	20.59.9	2029	35420
3504.00	3504 00 90	3504 00 90	20.59.51.00	20.59.51	20.59	20.59.1	2029	35420
3504.00	3504 00 90	3504 00 90	20.59.51.00	20.59.51	20.59	20.59.2	2029	35420
3504.00	3504 00 90	3504 00 90	20.59.51.00	20.59.51	20.59	20.59.3	2029	35420
3504.00	3504 00 90	3504 00 90	20.59.51.00	20.59.51	20.59	20.59.4	2029	35420
3504.00	3504 00 90	3504 00 90	20.59.51.00	20.59.51	20.59	20.59.5	2029	35420
3504.00	3504 00 90	3504 00 90	20.59.51.00	20.59.51	20.59	20.59.6	2029	35420
3504.00	3504 00 90	3504 00 90	20.59.51.00	20.59.51	20.59	20.59.7	2029	35420
3504.00	3504 00 90	3504 00 90	20.59.51.00	20.59.51	20.59	20.59.9	2029	35420
3507.90	3507 90 30	3507 90 30	20.14.64.70	20.14.64	20.14	20.14.0	2011	34170
3507.90	3507 90 90	3507 90 90	20.14.64.70	20.14.64	20.14	20.14.0	2011	34170
3701.10	3701 10 00	3701 10 00	20.59.11.30	20.59.11	20.59	20.59.1	2029	48341
3701.10	3701 10 00	3701 10 00	20.59.11.30	20.59.11	20.59	20.59.2	2029	48341
3701.10	3701 10 00	3701 10 00	20.59.11.30	20.59.11	20.59	20.59.3	2029	48341
3701.10	3701 10 00	3701 10 00	20.59.11.30	20.59.11	20.59	20.59.4	2029	48341
3701.10	3701 10 00	3701 10 00	20.59.11.30	20.59.11	20.59	20.59.5	2029	48341
3701.10	3701 10 00	3701 10 00	20.59.11.30	20.59.11	20.59	20.59.6	2029	48341
3701.10	3701 10 00	3701 10 00	20.59.11.30	20.59.11	20.59	20.59.7	2029	48341
3701.10	3701 10 00	3701 10 00	20.59.11.30	20.59.11	20.59	20.59.9	2029	48341
3702.10	3702 10 00	3702 10 00	20.59.11.50	20.59.11	20.59	20.59.1	2029	48341
3702.10	3702 10 00	3702 10 00	20.59.11.50	20.59.11	20.59	20.59.2	2029	48341









3824.99	3824 99 92	3824 99 92	20.59.59.94	20.59.59	20.59	20.59.7	2029	35499
3824.99	3824 99 92	3824 99 92	20.59.59.94	20.59.59	20.59	20.59.9	2029	35499
3824.99	3824 99 93	3824 99 93	20.59.59.94	20.59.59	20.59	20.59.1	2029	35499
3824.99	3824 99 93	3824 99 93	20.59.59.94	20.59.59	20.59	20.59.2	2029	35499
3824.99	3824 99 93	3824 99 93	20.59.59.94	20.59.59	20.59	20.59.3	2029	35499
3824.99	3824 99 93	3824 99 93	20.59.59.94	20.59.59	20.59	20.59.4	2029	35499
3824.99	3824 99 93	3824 99 93	20.59.59.94	20.59.59	20.59	20.59.5	2029	35499
3824.99	3824 99 93	3824 99 93	20.59.59.94	20.59.59	20.59	20.59.6	2029	35499
3824.99	3824 99 93	3824 99 93	20.59.59.94	20.59.59	20.59	20.59.7	2029	35499
3824.99	3824 99 93	3824 99 93	20.59.59.94	20.59.59	20.59	20.59.9	2029	35499
3824.99	3824 99 96	3824 99 96	20.59.59.94	20.59.59	20.59	20.59.1	2029	35499
3824.99	3824 99 96	3824 99 96	20.59.59.94	20.59.59	20.59	20.59.2	2029	35499
3824.99	3824 99 96	3824 99 96	20.59.59.94	20.59.59	20.59	20.59.3	2029	35499
3824.99	3824 99 96	3824 99 96	20.59.59.94	20.59.59	20.59	20.59.4	2029	35499
3824.99	3824 99 96	3824 99 96	20.59.59.94	20.59.59	20.59	20.59.5	2029	35499
3824.99	3824 99 96	3824 99 96	20.59.59.94	20.59.59	20.59	20.59.6	2029	35499
3824.99	3824 99 96	3824 99 96	20.59.59.94	20.59.59	20.59	20.59.7	2029	35499
3824.99	3824 99 96	3824 99 96	20.59.59.94	20.59.59	20.59	20.59.9	2029	35499
3905.99	3905 99 10	3905 99 10	20.16.52.70	20.16.52	20.16	20.16.0	2013	34790
3905.99	3905 99 90	3905 99 90	20.16.52.70	20.16.52	20.16	20.16.0	2013	34790
3923.29	3923 29 10	3923 29 10	22.22.12.00	22.22.12	22.22	22.22.0	2220	36410
3923.29	3923 29 90	3923 29 90	22.22.12.00	22.22.12	22.22	22.22.0	2220	36410
3926.20	3926 20 00	3926 20 00	22.29.10.10	22.29.10	22.29	22.29.0	2220	28243
3926.90	3926 90 50	3926 90 50	22.29.26.30	22.29.26	22.29	22.29.0	2220	36990
3926.90	3926 90 97	3926 90 92	22.29.29.50	22.29.29	22.29	22.29.0	2220	36990
3926.90	3926 90 97	3926 90 97	22.29.29.95	22.29.29	22.29	22.29.0	2220	36990
4014.90	4014 90 00	4014 90 00	22.19.71.30	22.19.71	22.19	22.19.0	2219	36270
4015.11	4015 11 00	4015 11 00	22.19.60.00	22.19.60	22.19	22.19.0	2219	36260
4015.19	4015 19 00	4015 19 00	22.19.60.00	22.19.60	22.19	22.19.0	2219	36260
4015.90	4015 90 00	4015 90 00	22.19.60.00	22.19.60	22.19	22.19.0	2219	36260
4818.50	4818 50 00	4818 50 00	17.22.12.50	17.22.12	17.22	17.22.0	1709	32193
4818.90	4818 90 10	4818 90 10	17.22.12.90	17.22.12	17.22	17.22.0	1709	32193
4818.90	4818 90 90	4818 90 90	17.22.12.90	17.22.12	17.22	17.22.0	1709	32193
6116.10	6116 10 20	6116 10 20	14.19.13.00	14.19.13	14.19	14.19.1	1410	28229
6116.10	6116 10 20	6116 10 20	14.19.13.00	14.19.13	14.19	14.19.2	1410	28229
6116.10	6116 10 80	6116 10 80	14.19.13.00	14.19.13	14.19	14.19.1	1410	28229
6116.10	6116 10 80	6116 10 80	14.19.13.00	14.19.13	14.19	14.19.2	1410	28229
6210.10	6210 10 10	6210 10 10	14.19.32.00	14.19.32	14.19	14.19.1	1410	28250
6210.10	6210 10 10	6210 10 10	14.19.32.00	14.19.32	14.19	14.19.2	1410	28250
6210.10	6210 10 92	6210 10 92	14.19.32.00	14.19.32	14.19	14.19.1	1410	28250
6210.10	6210 10 92	6210 10 92	14.19.32.00	14.19.32	14.19	14.19.2	1410	28250
6210.10	6210 10 98	6210 10 98	14.19.32.00	14.19.32	14.19	14.19.1	1410	28250
6210.10	6210 10 98	6210 10 98	14.19.32.00	14.19.32	14.19	14.19.2	1410	28250
6210.40	6210 40 00	6210 40 00	14.19.32.00	14.19.32	14.19	14.19.1	1410	28250
6210.40	6210 40 00	6210 40 00	14.19.32.00	14.19.32	14.19	14.19.2	1410	28250
6210.50	6210 50 00	6210 50 00	14.19.32.00	14.19.32	14.19	14.19.1	1410	28250

6210.50	6210 50 00	6210 50 00	14.19.32.00	14.19.32	14.19	14.19.2	1410	28250
6216.00	6216 00 00	6216 00 00	14.19.23.70	14.19.23	14.19	14.19.1	1410	28238
6216.00	6216 00 00	6216 00 00	14.19.23.70	14.19.23	14.19	14.19.2	1410	28238
6307.90	6307 90 10	6307 90 10	13.92.29.99	13.92.29	13.92	13.92.1	1392	27190
6307.90	6307 90 10	6307 90 10	13.92.29.99	13.92.29	13.92	13.92.2	1392	27190
6307.90	6307 90 91	6307 90 91	13.92.29.99	13.92.29	13.92	13.92.1	1392	27190
6307.90	6307 90 91	6307 90 91	13.92.29.99	13.92.29	13.92	13.92.2	1392	27190
6307.90	6307 90 92	6307 90 92	13.92.29.99	32.50.50	32.50	32.50.1	3250	27190
6307.90	6307 90 92	6307 90 92	13.92.29.99	32.50.50	32.50	32.50.2	3250	27190
6307.90	6307 90 92	6307 90 92	13.92.29.99	32.50.50	32.50	32.50.3	3250	27190
6307.90	6307 90 92	6307 90 92	13.92.29.99	32.50.50	32.50	32.50.4	3250	27190
6307.90	6307 90 92	6307 90 92	13.92.29.99	32.50.50	32.50	32.50.5	3250	27190
6307.90	6307 90 98	6307 90 98	13.92.29.99	13.92.29	13.92	13.92.1	1392	27190
6307.90	6307 90 98	6307 90 98	13.92.29.99	13.92.29	13.92	13.92.2	1392	27190
6505.00	6505 00 10	6505 00 10	14.19.42.30	14.19.42	14.19	14.19.1	1410	28262
6505.00	6505 00 10	6505 00 10	14.19.42.30	14.19.42	14.19	14.19.2	1410	28262
6505.00	6505 00 30	6505 00 30	14.19.42.70	14.19.42	14.19	14.19.1	1410	28262
6505.00	6505 00 30	6505 00 30	14.19.42.70	14.19.42	14.19	14.19.2	1410	28262
6505.00	6505 00 90	6505 00 90	14.19.42.70	14.19.42	14.19	14.19.1	1410	28262
6505.00	6505 00 90	6505 00 90	14.19.42.70	14.19.42	14.19	14.19.2	1410	28262
7017.10	7017 10 00	7017 10 00	23.19.23.30	23.19.23	23.19	23.19.1	2310	37195
7017.10	7017 10 00	7017 10 00	23.19.23.30	23.19.23	23.19	23.19.2	2310	37195
7017.10	7017 10 00	7017 10 00	23.19.23.30	23.19.23	23.19	23.19.9	2310	37195
7017.20	7017 20 00	7017 20 00	23.19.23.30	23.19.23	23.19	23.19.1	2310	37195
7017.20	7017 20 00	7017 20 00	23.19.23.30	23.19.23	23.19	23.19.2	2310	37195
7017.20	7017 20 00	7017 20 00	23.19.23.30	23.19.23	23.19	23.19.9	2310	37195
7017.90	7017 90 00	7017 90 00	23.19.23.30	23.19.23	23.19	23.19.1	2310	37195
7017.90	7017 90 00	7017 90 00	23.19.23.30	23.19.23	23.19	23.19.2	2310	37195
7017.90	7017 90 00	7017 90 00	23.19.23.30	23.19.23	23.19	23.19.9	2310	37195
7311.00	7311 00 11	7311 00 11	25.29.12.00	25.29.12	25.29	25.29.0	2512	42220
7311.00	7311 00 13	7311 00 13	25.29.12.00	25.29.12	25.29	25.29.0	2512	42220
7311.00	7311 00 19	7311 00 19	25.29.12.00	25.29.12	25.29	25.29.0	2512	42220
7311.00	7311 00 30	7311 00 30	25.29.12.00	25.29.12	25.29	25.29.0	2512	42220
7311.00	7311 00 91	7311 00 91	25.29.12.00	25.29.12	25.29	25.29.0	2512	42220
7311.00	7311 00 99	7311 00 99	25.29.12.00	25.29.12	25.29	25.29.0	2512	42220
7324.90	7324 90 00	7324 90 00	25.99.11.31	25.99.11	25.99	25.99.1	2599	42911
7324.90	7324 90 00	7324 90 00	25.99.11.31	25.99.11	25.99	25.99.2	2599	42911
7324.90	7324 90 00	7324 90 00	25.99.11.31	25.99.11	25.99	25.99.3	2599	42911
7324.90	7324 90 00	7324 90 00	25.99.11.31	25.99.11	25.99	25.99.9	2599	42911
7613.00	7613 00 00	7613 00 00	25.29.12.00	25.29.12	25.29	25.29.0	2512	42220
8413.19	8413 19 00	8413 19 00	28.13.11.25	28.13.11	28.13	28.13.0	2813	43220
8419.20	8419 20 00	8419 20 00	32.50.12.00	32.50.12	32.50	32.50.1	3250	48140
8419.20	8419 20 00	8419 20 00	32.50.12.00	32.50.12	32.50	32.50.2	3250	48140
8419.20	8419 20 00	8419 20 00	32.50.12.00	32.50.12	32.50	32.50.3	3250	48140
8419.20	8419 20 00	8419 20 00	32.50.12.00	32.50.12	32.50	32.50.4	3250	48140
8419.20	8419 20 00	8419 20 00	32.50.12.00	32.50.12	32.50	32.50.5	3250	48140

8421.39	8421 39 15	8421 39 15	28.25.14.50	28.25.14	28.25	28.25.0	2819	43914
8421.39	8421 39 25	8421 39 25	28.25.14.10	28.25.14	28.25	28.25.0	2819	43914
8421.39	8421 39 35	8421 39 35	28.25.14.40	28.25.14	28.25	28.25.0	2819	43914
8421.39	8421 39 85	8421 39 85	28.25.14.30	28.25.14	28.25	28.25.0	2819	43914
8703.10	8703 10 11	8703 10 11	29.10.52.00	29.10.52	29.10	29.10.0	2910	49116
8703.10	8703 10 18	8703 10 18	29.10.52.00	29.10.52	29.10	29.10.0	2910	49116
8703.21	8703 21 10	8703 21 10	29.10.21.00	29.10.21	29.10	29.10.0	2910	49113
8703.21	8703 21 90	8703 21 90						49113
8703.22	8703 22 10	8703 22 10	29.10.21.00	29.10.21	29.10	29.10.0	2910	49113
8703.22	8703 22 90	8703 22 90						49113
8703.23	8703 23 11	8703 23 11	29.10.22.50	29.10.22	29.10	29.10.0	2910	49113
8703.23	8703 23 19	8703 23 19	29.10.22.30	29.10.22	29.10	29.10.0	2910	49113
8703.23	8703 23 90	8703 23 90						49113
8703.24	8703 24 10	8703 24 10	29.10.22.30	29.10.22	29.10	29.10.0	2910	49113
8703.24	8703 24 90	8703 24 90						49113
8703.31	8703 31 10	8703 31 10	29.10.23.10	29.10.23	29.10	29.10.0	2910	49113
8703.31	8703 31 90	8703 31 90						49113
8703.32	8703 32 11	8703 32 11	29.10.23.53	29.10.23	29.10	29.10.0	2910	49113
8703.32	8703 32 19	8703 32 19	29.10.23.30	29.10.23	29.10	29.10.0	2910	49113
8703.32	8703 32 90	8703 32 90						49113
8703.33	8703 33 11	8703 33 11	29.10.23.55	29.10.23	29.10	29.10.0	2910	49113
8703.33	8703 33 19	8703 33 19	29.10.23.40	29.10.23	29.10	29.10.0	2910	49113
8703.33	8703 33 90	8703 33 90						49113
8703.40	8703 40 10	8703 40 10	29.10.24.10	29.10.24	29.10	29.10.0	2910	49113
8703.40	8703 40 90	8703 40 90						49113
8703.50	8703 50 00	8703 50 00	29.10.24.10	29.10.24	29.10	29.10.0	2910	49113
8703.60	8703 60 10	8703 60 10	29.10.24.30	29.10.24	29.10	29.10.0	2910	49113
8703.60	8703 60 90	8703 60 90						49113
8703.70	8703 70 00	8703 70 00	29.10.24.30	29.10.24	29.10	29.10.0	2910	49113
8703.80	8703 80 10	8703 80 10	29.10.24.50	29.10.24	29.10	29.10.0	2910	49113
8703.80	8703 80 90	8703 80 90						49113
8703.90	8703 90 00	8703 90 00	29.10.24.90	29.10.24	29.10	29.10.0	2910	49113
8705.90	8705 90 30	8705 90 30	29.10.59.90	29.10.59	29.10	29.10.0	2910	49119
8705.90	8705 90 80	8705 90 80	29.10.59.90	29.10.59	29.10	29.10.0	2910	49119
8713.10	8713 10 00	8713 10 00	30.92.20.30	30.92.20	30.92	30.92.1	3092	49922
8713.10	8713 10 00	8713 10 00	30.92.20.30	30.92.20	30.92	30.92.2	3092	49922
8713.10	8713 10 00	8713 10 00	30.92.20.30	30.92.20	30.92	30.92.3	3092	49922
8713.10	8713 10 00	8713 10 00	30.92.20.30	30.92.20	30.92	30.92.4	3092	49922
8713.90	8713 90 00	8713 90 00	30.92.20.90	30.92.20	30.92	30.92.1	3092	49922
8713.90	8713 90 00	8713 90 00	30.92.20.90	30.92.20	30.92	30.92.2	3092	49922
8713.90	8713 90 00	8713 90 00	30.92.20.90	30.92.20	30.92	30.92.3	3092	49922
8713.90	8713 90 00	8713 90 00	30.92.20.90	30.92.20	30.92	30.92.4	3092	49922
9004.90	9004 90 10	9004 90 10	32.50.42.90	32.50.42	32.50	32.50.1	3250	48312
9004.90	9004 90 10	9004 90 10	32.50.42.90	32.50.42	32.50	32.50.2	3250	48312
9004.90	9004 90 10	9004 90 10	32.50.42.90	32.50.42	32.50	32.50.3	3250	48312
9004.90	9004 90 10	9004 90 10	32.50.42.90	32.50.42	32.50	32.50.4	3250	48312

9004.90	9004 90 10	9004 90 10	32.50.42.90	32.50.42	32.50	32.50.5	3250	48312
9004.90	9004 90 90	9004 90 90	32.50.42.90	32.50.42	32.50	32.50.1	3250	48312
9004.90	9004 90 90	9004 90 90	32.50.42.90	32.50.42	32.50	32.50.2	3250	48312
9004.90	9004 90 90	9004 90 90	32.50.42.90	32.50.42	32.50	32.50.3	3250	48312
9004.90	9004 90 90	9004 90 90	32.50.42.90	32.50.42	32.50	32.50.4	3250	48312
9004.90	9004 90 90	9004 90 90	32.50.42.90	32.50.42	32.50	32.50.5	3250	48312
9010.50	9010 50 00	9010 50 00	26.70.19.10	26.70.19	26.70	26.70.1	2670	48329
9010.50	9010 50 00	9010 50 00	26.70.19.10	26.70.19	26.70	26.70.2	2670	48329
9011.10	9011 10 00	9011 10 10	26.70.22.70	26.70.22	26.70	26.70.1	2670	48314
9011.10	9011 10 00	9011 10 10	26.70.22.70	26.70.22	26.70	26.70.2	2670	48314
9011.10	9011 10 00	9011 10 90	26.70.22.70	26.70.22	26.70	26.70.1	2670	48314
9011.10	9011 10 00	9011 10 90	26.70.22.70	26.70.22	26.70	26.70.2	2670	48314
9011.80	9011 80 00	9011 80 00	26.70.22.70	26.70.22	26.70	26.70.1	2670	48314
9011.80	9011 80 00	9011 80 00	26.70.22.70	26.70.22	26.70	26.70.2	2670	48314
9018.11	9018 11 00	9018 11 00	26.60.12.30	26.60.12	26.60	26.60.0	2660	48121
9018.12	9018 12 00	9018 12 00	26.60.12.80	26.60.12	26.60	26.60.0	2660	48121
9018.13	9018 13 00	9018 13 00	26.60.12.80	26.60.12	26.60	26.60.0	2660	48121
9018.14	9018 14 00	9018 14 00	26.60.12.80	26.60.12	26.60	26.60.0	2660	48121
9018.19	9018 19 10	9018 19 10	26.60.12.80	26.60.12	26.60	26.60.0	2660	48121
9018.19	9018 19 90	9018 19 90	26.60.12.80	26.60.12	26.60	26.60.0	2660	48121
9018.20	9018 20 00	9018 20 00	26.60.13.00	26.60.13	26.60	26.60.0	2660	48122
9018.31	9018 31 10	9018 31 10	32.50.13.11	32.50.13	32.50	32.50.1	3250	48150
9018.31	9018 31 10	9018 31 10	32.50.13.11	32.50.13	32.50	32.50.2	3250	48150
9018.31	9018 31 10	9018 31 10	32.50.13.11	32.50.13	32.50	32.50.3	3250	48150
9018.31	9018 31 10	9018 31 10	32.50.13.11	32.50.13	32.50	32.50.4	3250	48150
9018.31	9018 31 10	9018 31 10	32.50.13.11	32.50.13	32.50	32.50.5	3250	48150
9018.31	9018 31 90	9018 31 90	32.50.13.11	32.50.13	32.50	32.50.1	3250	48150
9018.31	9018 31 90	9018 31 90	32.50.13.11	32.50.13	32.50	32.50.2	3250	48150
9018.31	9018 31 90	9018 31 90	32.50.13.11	32.50.13	32.50	32.50.3	3250	48150
9018.31	9018 31 90	9018 31 90	32.50.13.11	32.50.13	32.50	32.50.4	3250	48150
9018.31	9018 31 90	9018 31 90	32.50.13.11	32.50.13	32.50	32.50.5	3250	48150
9018.32	9018 32 10	9018 32 10	32.50.13.13	32.50.13	32.50	32.50.1	3250	48150
9018.32	9018 32 10	9018 32 10	32.50.13.13	32.50.13	32.50	32.50.2	3250	48150
9018.32	9018 32 10	9018 32 10	32.50.13.13	32.50.13	32.50	32.50.3	3250	48150
9018.32	9018 32 10	9018 32 10	32.50.13.13	32.50.13	32.50	32.50.4	3250	48150
9018.32	9018 32 10	9018 32 10	32.50.13.13	32.50.13	32.50	32.50.5	3250	48150
9018.32	9018 32 90	9018 32 90	32.50.13.15	32.50.13	32.50	32.50.1	3250	48150
9018.32	9018 32 90	9018 32 90	32.50.13.15	32.50.13	32.50	32.50.2	3250	48150
9018.32	9018 32 90	9018 32 90	32.50.13.15	32.50.13	32.50	32.50.3	3250	48150
9018.32	9018 32 90	9018 32 90	32.50.13.15	32.50.13	32.50	32.50.4	3250	48150
9018.32	9018 32 90	9018 32 90	32.50.13.15	32.50.13	32.50	32.50.5	3250	48150
9018.39	9018 39 00	9018 39 00	32.50.13.17	32.50.13	32.50	32.50.1	3250	48150
9018.39	9018 39 00	9018 39 00	32.50.13.17	32.50.13	32.50	32.50.2	3250	48150
9018.39	9018 39 00	9018 39 00	32.50.13.17	32.50.13	32.50	32.50.3	3250	48150
9018.39	9018 39 00	9018 39 00	32.50.13.17	32.50.13	32.50	32.50.4	3250	48150
9018.39	9018 39 00	9018 39 00	32.50.13.17	32.50.13	32.50	32.50.5	3250	48150



9018.90	9018 90 50	9018 90 50	32.50.13.63	32.50.13	32.50	32.50.2	3250	48150
9018.90	9018 90 50	9018 90 50	32.50.13.63	32.50.13	32.50	32.50.3	3250	48150
9018.90	9018 90 50	9018 90 50	32.50.13.63	32.50.13	32.50	32.50.4	3250	48150
9018.90	9018 90 50	9018 90 50	32.50.13.63	32.50.13	32.50	32.50.5	3250	48150
9018.90	9018 90 60	9018 90 60	32.50.13.65	32.50.13	32.50	32.50.1	3250	48150
9018.90	9018 90 60	9018 90 60	32.50.13.65	32.50.13	32.50	32.50.2	3250	48150
9018.90	9018 90 60	9018 90 60	32.50.13.65	32.50.13	32.50	32.50.3	3250	48150
9018.90	9018 90 60	9018 90 60	32.50.13.65	32.50.13	32.50	32.50.4	3250	48150
9018.90	9018 90 60	9018 90 60	32.50.13.65	32.50.13	32.50	32.50.5	3250	48150
9018.90	9018 90 75	9018 90 75	32.50.13.70	32.50.13	32.50	32.50.1	3250	48150
9018.90	9018 90 75	9018 90 75	32.50.13.70	32.50.13	32.50	32.50.2	3250	48150
9018.90	9018 90 75	9018 90 75	32.50.13.70	32.50.13	32.50	32.50.3	3250	48150
9018.90	9018 90 75	9018 90 75	32.50.13.70	32.50.13	32.50	32.50.4	3250	48150
9018.90	9018 90 75	9018 90 75	32.50.13.70	32.50.13	32.50	32.50.5	3250	48150
9018.90	9018 90 84	9018 90 84	32.50.13.70	32.50.13	32.50	32.50.1	3250	48150
9018.90	9018 90 84	9018 90 84	32.50.13.70	32.50.13	32.50	32.50.2	3250	48150
9018.90	9018 90 84	9018 90 84	32.50.13.70	32.50.13	32.50	32.50.3	3250	48150
9018.90	9018 90 84	9018 90 84	32.50.13.70	32.50.13	32.50	32.50.4	3250	48150
9018.90	9018 90 84	9018 90 84	32.50.13.70	32.50.13	32.50	32.50.5	3250	48150
9019.20	9019 20 00	9019 20 00	32.50.21.80	32.50.21	32.50	32.50.1	3250	48160
9019.20	9019 20 00	9019 20 00	32.50.21.80	32.50.21	32.50	32.50.2	3250	48160
9019.20	9019 20 00	9019 20 00	32.50.21.80	32.50.21	32.50	32.50.3	3250	48160
9019.20	9019 20 00	9019 20 00	32.50.21.80	32.50.21	32.50	32.50.4	3250	48160
9019.20	9019 20 00	9019 20 00	32.50.21.80	32.50.21	32.50	32.50.5	3250	48160
9020.00	9020 00 00	9020 00 00	32.99.59.10	32.99.59	32.99	32.99.1	3290	48160
9020.00	9020 00 00	9020 00 00	32.99.59.10	32.99.59	32.99	32.99.2	3290	48160
9020.00	9020 00 00	9020 00 00	32.99.59.10	32.99.59	32.99	32.99.3	3290	48160
9020.00	9020 00 00	9020 00 00	32.99.59.10	32.99.59	32.99	32.99.4	3290	48160
9020.00	9020 00 00	9020 00 00	32.99.59.10	32.99.59	32.99	32.99.9	3290	48160
9021.50	9021 50 00	9021 50 00	26.60.14.50	26.60.14	26.60	26.60.0	2660	48172
9022.12	9022 12 00	9022 12 00	26.60.11.15	26.60.11	26.60	26.60.0	2660	48110
9022.14	9022 14 00	9022 14 00	26.60.11.15	26.60.11	26.60	26.60.0	2660	48110
9022.19	9022 19 00	9022 19 00	26.60.11.19	26.60.11	26.60	26.60.0	2660	48110
9022.21	9022 21 00	9022 21 00	26.60.11.30	26.60.11	26.60	26.60.0	2660	48110
9022.29	9022 29 00	9022 29 00	26.60.11.30	26.60.11	26.60	26.60.0	2660	48110
9022.30	9022 30 00	9022 30 00	26.60.11.50	26.60.11	26.60	26.60.0	2660	48110
9022.90	9022 90 20	9022 90 20	26.60.11.70	26.60.11	26.60	26.60.0	2660	48110
9022.90	9022 90 80	9022 90 80	26.60.11.70	26.60.11	26.60	26.60.0	2660	48110
9025.11	9025 11 20	9025 11 20	32.50.13.40	32.50.13	32.50	32.50.1	3250	48251
9025.11	9025 11 20	9025 11 20	32.50.13.40	32.50.13	32.50	32.50.2	3250	48251
9025.11	9025 11 20	9025 11 20	32.50.13.40	32.50.13	32.50	32.50.3	3250	48251
9025.11	9025 11 20	9025 11 20	32.50.13.40	32.50.13	32.50	32.50.4	3250	48251
9025.11	9025 11 20	9025 11 20	32.50.13.40	32.50.13	32.50	32.50.5	3250	48251
9025.11	9025 11 80	9025 11 80	26.51.51.10	26.51.51	26.51	26.51.1	2651	48251
9025.11	9025 11 80	9025 11 80	26.51.51.10	26.51.51	26.51	26.51.2	2651	48251
9025.19	9025 19 00	9025 19 20	26.51.51.35	26.51.51	26.51	26.51.1	2651	48251

9025.19	9025 19 00	9025 19 20	26.51.51.35	26.51.51	26.51	26.51.2	2651	48251
9025.19	9025 19 00	9025 19 80	26.51.51.39	26.51.51	26.51	26.51.1	2651	48251
9025.19	9025 19 00	9025 19 80	26.51.51.39	26.51.51	26.51	26.51.2	2651	48251
9026.80	9026 80 20	9026 80 20	26.51.52.83	26.51.52	26.51	26.51.1	2651	48252
9026.80	9026 80 20	9026 80 20	26.51.52.83	26.51.52	26.51	26.51.2	2651	48252
9026.80	9026 80 80	9026 80 80	26.51.52.89	26.51.52	26.51	26.51.1	2651	48252
9026.80	9026 80 80	9026 80 80	26.51.52.89	26.51.52	26.51	26.51.2	2651	48252
9027.80	9027 80 05	9027 80 05	26.70.24.90	26.70.24	26.70	26.70.1	2670	48253
9027.80	9027 80 05	9027 80 05	26.70.24.90	26.70.24	26.70	26.70.2	2670	48253
9027.80	9027 80 20	9027 80 11	26.51.53.81	26.51.53	26.51	26.51.1	2651	48253
9027.80	9027 80 20	9027 80 11	26.51.53.81	26.51.53	26.51	26.51.2	2651	48253
9027.80	9027 80 20	9027 80 99	26.51.53.95	26.51.53	26.51	26.51.1	2651	48253
9027.80	9027 80 20	9027 80 99	26.51.53.95	26.51.53	26.51	26.51.2	2651	48253
9027.80	9027 80 80	9027 80 13	26.51.53.83	26.51.53	26.51	26.51.1	2651	48253
9027.80	9027 80 80	9027 80 13	26.51.53.83	26.51.53	26.51	26.51.2	2651	48253
9027.80	9027 80 80	9027 80 17	26.51.53.83	26.51.53	26.51	26.51.1	2651	48253
9027.80	9027 80 80	9027 80 17	26.51.53.83	26.51.53	26.51	26.51.2	2651	48253
9027.80	9027 80 80	9027 80 91	26.51.53.95	26.51.53	26.51	26.51.1	2651	48253
9027.80	9027 80 80	9027 80 91	26.51.53.95	26.51.53	26.51	26.51.2	2651	48253
9027.80	9027 80 80	9027 80 99	26.51.53.95	26.51.53	26.51	26.51.1	2651	48253
9027.80	9027 80 80	9027 80 99	26.51.53.95	26.51.53	26.51	26.51.2	2651	48253
9028.20	9028 20 00	9028 20 00	26.51.63.50	26.51.63	26.51	26.51.1	2651	48263
9028.20	9028 20 00	9028 20 00	26.51.63.50	26.51.63	26.51	26.51.2	2651	48263
9030.20	9030 20 00	9030 20 00	26.51.00.Z0	26.51.45	26.51	26.51.1	2651	48242
9030.20	9030 20 00	9030 20 00	26.51.00.Z0	26.51.45	26.51	26.51.2	2651	48242
9030.20	9030 20 00	9030 20 00	26.51.42.00	26.51.45	26.51	26.51.1	2651	48242
9030.20	9030 20 00	9030 20 00	26.51.42.00	26.51.45	26.51	26.51.2	2651	48242
9030.20	9030 20 00	9030 20 00	26.51.45.00	26.51.45	26.51	26.51.1	2651	48242
9030.20	9030 20 00	9030 20 00	26.51.45.00	26.51.45	26.51	26.51.2	2651	48242
9402.90	9402 90 00	9402 90 00	32.50.30.50	32.50.30	32.50	32.50.1	3250	48180
9402.90	9402 90 00	9402 90 00	32.50.30.50	32.50.30	32.50	32.50.2	3250	48180
9402.90	9402 90 00	9402 90 00	32.50.30.50	32.50.30	32.50	32.50.3	3250	48180
9402.90	9402 90 00	9402 90 00	32.50.30.50	32.50.30	32.50	32.50.4	3250	48180
9402.90	9402 90 00	9402 90 00	32.50.30.50	32.50.30	32.50	32.50.5	3250	48180

Source: Authors' elaboration

### Annex 3 - COVID-19 products according to the Prodcod list 2019

Prodcod 2019	Description
08.93.10.00	Salt (including denatured salt but excluding salt suitable for human consumption) and pure sodium chloride, whether or not in aqueous solution or containing added anti-caking or free-flowing agents
10.84.30.00	Salt suitable for human consumption
11.01.10.65	Spirits distilled from fruit (excluding liqueurs, gin, geneva; grape wine or grape marc (important: excluding alcohol duty))
11.01.10.70	Pure alcohols (important: excluding alcohol duty)
11.01.10.80	Spirits, liqueurs and other spirituous beverages (excluding spirits distilled from grape wine, grape marc or fruit/whisky, rum, tafia, gin and geneva, Vodka of an alcoholic strength by volume of $\leq 45.4\%$ , spirits distilled from fruit) (important: excluding alcohol duty)
13.92.29.99	Floor-cloths, dish-cloths, dusters and similar cleaning cloths, knitted or crocheted; life-jackets, life-belts and other made up articles (excluding sanitary towels and napkins and similar articles)
14.19.13.00	Gloves, mittens and mitts, of knitted or crocheted textiles
14.19.23.70	Gloves, mittens and mitts (excluding knitted or crocheted)
14.19.32.00	Garments made up of felt or non-wovens, textile fabrics impregnated or coated
14.19.42.30	Felt hats and other felt headgear, made from hat bodies or hoods and plateaux
14.19.42.70	Hats and other headgear, knitted or crocheted or made-up from lace, felt or other textile fabric in the piece (but not in strips); hair-nets of any material
17.22.12.50	Articles of apparel and clothing accessories of paper pulp; paper; cellulose wadding or webs of cellulose fibres (excluding handkerchiefs, headgear)
17.22.12.90	Household, sanitary or hospital articles of paper, etc., n.e.c.
20.11.11.70	Oxygen
20.13.63.00	Hydrogen peroxide
20.14.24.10	Monophenols
20.14.42.90	Oxygen-function amino-compounds (excluding amino-alcohols, their esters and ethers and salts thereof, lysine and its salts and esters, glutamic acid its salts and esters)
20.14.43.40	Imides and their derivatives, and salts thereof (excluding saccharin and its salts)
20.14.52.25	Heterocyclic compounds with oxygen only hetero-atom(s) (excluding other lactones)
20.14.52.30	Heterocyclic compounds with nitrogen only hetero-atom(s); containing an unfused imidazole ring (excluding hydantoin and its derivatives)
20.14.52.80	Compounds containing in the structure an unfused pyridine ring or a quinoline or isoquinoline ring-system, not further fused; lactames; other heterocyclic compounds with nitrogen hetero-atom(s) only (excluding compounds containing in the structure an unfused pyrazole ring, an unfused imidazole ring, a pyrimidine ring, a piperazine ring or an unfused triazine ring)
20.14.52.90	Nucleic acids and other heterocyclic compounds - thiazole, benzothiazole, other cycles
20.14.53.80	Esters of other inorganic acids of non-metals (excluding esters of hydrogen halides) and their salts; their halogenated, sulphonated, nitrated or nitrosated derivatives
20.14.64.70	Enzymes; prepared enzymes (not elsewhere specified or included) (excluding rennet and concentrates)
20.14.74.00	Undenatured ethyl alcohol of an alcoholic strength by volume $\geq 80\%$ (important: excluding alcohol duty)
20.16.52.70	Polymers of vinyl esters or other vinyl polymers, in primary forms (excluding vinyl acetate)
20.20.14.30	Disinfectants based on quaternary ammonium salts put up in forms or packings for retail sale or as preparations or articles (excluding hazardous pesticides)
20.20.14.50	Disinfectants based on halogenated compounds put up in forms or packings for retail sale or as preparations (excluding hazardous pesticides)
20.20.14.90	Disinfectants put up in forms or packings for retail sale or as preparations or articles (excluding those based on quaternary ammonium salts, those based on halogenated compounds and those being hazardous pesticides)
20.41.20.30	Cationic organic surface-active agents (excluding soap)
20.41.20.50	Non-ionic organic surface-active agents (excluding soap)
20.41.31.50	Soap in the form of flakes, wafers, granules or powders
20.41.31.80	Soap in forms excluding bars, cakes or moulded shapes, paper, wadding, felt and non-wovens impregnated or coated with soap/detergent, flakes, granules or powders
20.41.32.40	Surface-active preparations, whether or not containing soap, p.r.s. (excluding those for use as soap)
20.41.32.50	Washing preparations and cleaning preparations, with or without soap, p.r.s. including auxiliary washing preparations excluding those for use as soap, surface-active preparations
20.42.19.15	Soap and organic surface-active products in bars, etc., for toilet use
20.42.19.30	Organic surface-active products and preparations for washing the skin; whether or not containing soap, p.r.s.
20.59.11.30	Photographic plates and film in the flat, sensitised and unexposed, of any material; instant print film in the flat, sensitised and unexposed (excluding paper; paperboard or textiles)
20.59.11.50	Photographic film in rolls, sensitised, unexposed of any material; instant print film in rolls sensitised and unexposed (excluding paper, paperboard or textiles)

20.59.51.00	Peptones and their derivatives; other protein substances and their derivatives; hide powder including glutelins and prolamins, globulins, glycinin, keratins, nucleoproteids, protein isolates
20.59.52.10	Composite diagnostic or laboratory reagents, including paper impregnated or coated with diagnostic or laboratory reagents
20.59.52.70	Prepared culture media for development of micro-organisms
20.59.57.30	Naphthenic acids, their water-insoluble salts and their esters
20.59.59.10	Ion-exchangers; getters for vacuum tubes; petroleum sulphonates (excluding petroleum sulphonates of alkali metals, of ammonium or of ethanolamines); thiophenated sulphonic acids of oils obtained from bituminous minerals, and their salts
20.59.59.40	Anti-scaling and similar compounds
20.59.59.53	Preparations for electroplating
20.59.59.57	Mixtures of mono-, di- and tri-, fatty acid esters of glycerol (emulsifiers for fats)
20.59.59.63	Products and preparations for pharmaceutical or surgical uses
20.59.59.65	Auxiliary products for foundries (excluding prepared binders for foundry moulds or cores)
20.59.59.67	Fire-proofing, water-proofing and similar protective preparations used in the building industry
20.59.59.94	Other chemical products, n.e.c.
21.10.20.40	Quaternary ammonium salts and hydroxides; lecithins and other phosphoaminolipids, whether or not chemically defined
21.10.20.70	Cyclic amides and their derivatives, and salts thereof (including cyclic carbamates) (excluding ureines and their derivatives, and salts thereof)
21.10.31.59	Compounds containing a pyrimidine ring (whether or not hydrogenated) or piperazine ring in the structure (excluding malonylurea (barbituric acid) and its derivatives)
21.10.31.80	Compounds containing a phenothiazine ring-system (whether or not hydrogenated); not further fused
21.10.52.00	Hormones, prostaglandins, thromboxanes and leukotrienes, natural or reproduced by synthesis; derivatives and structural analogues thereof, including chain modified polypeptides, used primarily as hormones
21.10.53.00	Glycosides and vegetable alkaloids, natural or reproduced by synthesis, and their salts, ethers, esters and other derivatives
21.10.54.00	Antibiotics
21.10.60.20	Extracts of glands or other organs or of their secretions (for organo-therapeutic uses)
21.10.60.40	Glands and other organs or substances for therapeutic or prophylactic use, n.e.c. (excluding blood and extracts of glands or other organs)
21.10.60.55	Human blood; animal blood prepared for therapeutic, prophylactic or diagnostic uses; cultures of micro-organisms; toxins (excluding yeasts)
21.20.11.30	Medicaments containing penicillins or derivatives thereof, with a penicillanic acid structure, or streptomycins or their derivatives, for therapeutic or prophylactic uses, n.p.r.s.
21.20.11.50	Medicaments of other antibiotics, n.p.r.s.
21.20.11.60	Medicaments of penicillins, streptomycins or derivatives thereof, in doses or p.r.s.
21.20.11.80	Medicaments of other antibiotics, p.r.s.
21.20.12.30	Medicaments containing insulin but not antibiotics, for therapeutic or prophylactic uses, not put up in measured doses or for retail sale
21.20.12.50	Medicaments containing hormones but not antibiotics, for therapeutic or prophylactic uses, not put up in measured doses or for retail sale (excluding insulin)
21.20.12.60	Medicaments containing insulin but not antibiotics, for therapeutic or prophylactic uses, put up in measured doses or for retail sale
21.20.12.70	Medicaments containing corticosteroid hormones, their derivatives and structural analogues, put up in measured doses or for retail sale
21.20.13.10	Medicaments of alkaloids or derivatives thereof, n.p.r.s.
21.20.13.20	Other medicaments for therapeutic or prophylactic uses, of HS 3003, n.p.r.s.
21.20.13.40	Medicaments of alkaloids or derivatives thereof, p.r.s.
21.20.13.60	Medicaments containing vitamins, provitamins, derivatives and intermixtures thereof, for therapeutic or prophylactic uses, put up in measured doses or for retail sale
21.20.13.80	Other medicaments of mixed or unmixed products, p.r.s., n.e.c.
21.20.21.25	Antisera, other immunological products which are directly involved in the regulation of immunological processes and other blood fractions
21.20.21.45	Vaccines for human medicine
21.20.23.20	Blood-grouping reagents
21.20.23.40	Opacifying preparations for X-ray examinations; diagnostic reagents designed to be administered to the patient
21.20.24.20	Adhesive dressings or similar articles; impregnated or coated with pharmaceutical substances; or put up in forms for retail sale
21.20.24.30	Sterile surgical catgut
21.20.24.40	Wadding, gauze, etc., with pharmaceutical substances, p.r.s., n.e.c.
21.20.24.60	First-aid boxes and kits
22.19.60.00	Articles of apparel and clothing accessories (including gloves, mittens and mitts), for all purposes, of vulcanised rubber other than hard rubber

22.19.71.30	Hygienic or pharmaceutical articles of rubber (excluding sheath contraceptives)
22.22.12.00	Plastic sacks and bags (including cones) (excluding of polymers of ethylene)
22.29.10.10	Plastic articles of apparel and clothing accessories (including headgear, gloves, raincoats, aprons, belts and babiesâ€™™ bibs) (excluding safety headgear)
22.29.26.30	Perforated buckets and similar articles used to filter water at the entrance to drains, of plastic
22.29.29.50	Other articles made from sheet
22.29.29.95	Other articles of plastic n.e.c (excluding appliances identifiable for ostomy use)
23.19.23.30	Laboratory, hygienic or pharmaceutical glassware whether or not graduated
25.29.12.00	Containers for compressed or liquefied gas, of metal
25.99.11.31	Sanitary ware and parts of sanitary ware of iron or steel
26.51.00.Z0	Cathode-ray oscilloscopes and cathode-ray oscillographs; Instruments and apparatus for measuring or checking electrical quantities n.e.c.
26.51.42.00	Cathode-ray oscilloscopes and cathode-ray oscillographs
26.51.45.00	Instruments and apparatus for measuring or checking electrical quantities n.e.c.
26.51.51.10	Thermometers, liquid-filled, for direct reading, not combined with other instruments (excluding clinical or veterinary thermometers)
26.51.51.35	Electronic thermometers and pyrometers, not combined with other instruments (excluding liquid filled)
26.51.51.39	Thermometers, not combined with other instruments and not liquid filled, n.e.c.
26.51.52.83	Electronic instruments and apparatus for measuring variables of liquids/gases (including heat meters; excluding for measuring pressure/flow/level of liquids)
26.51.52.89	Non-electronic instruments for measuring or checking variables of liquids or gases (including heat meters; excluding for measuring or checking pressure/flow/level of liquids)
26.51.53.81	Electronic ph and rh meters, other apparatus for measuring conductivity and electrochemical quantities (including use laboratory/field environment, use process monitoring/control)
26.51.53.83	Other electronic instruments and apparatus for physical or chemical analysis n.e.c.
26.51.53.95	Other non-electronic instruments and apparatus for physical or chemical analyses, n.e.c.
26.51.63.50	Liquid supply or production meters (including calibrated) (excluding pumps)
26.60.11.15	Apparatus based on the use of X-rays, for medical, surgical, dental or veterinary uses (including radiography and radiotherapy apparatus)
26.60.11.19	Apparatus based on the use of X-rays (excluding for medical, surgical, dental or veterinary use)
26.60.11.30	Apparatus based on the use of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus
26.60.11.50	X-ray tubes (excluding glass envelopes for X-ray tubes)
26.60.11.70	X-ray generators, high tension generators, including parts of HS 9022
26.60.12.30	Electro-cardiographs
26.60.12.80	Electro-diagnostic, apparatus (excluding electro-cardiographs), n.e.c.
26.60.13.00	Ultraviolet or infrared apparatus used in medical, surgical, dental or veterinary sciences
26.60.14.50	Pacemakers for stimulating heart muscles (excluding parts and accessories)
26.70.19.10	Flashlights (including photographic flashbulbs, flashcubes and the like); photographic enlargers; apparatus for photographic laboratories; negastoscopes, projection screens
26.70.22.70	Compound optical microscopes, including those for photomicrography, cinephotomicrography or microprojection
26.70.24.90	Exposure meters, stroboscopes, optical instruments, appliances and machines for inspecting semiconductor wafers or devices or for inspecting photomasks or reticles used in manufacturing semiconductor devices, profile projectors and other optical instruments, appliances and machines for measuring or checking
28.13.11.25	Pumps fitted or designed to be fitted with a measuring device, for dispensing liquids (excl.pumps for dispensing fuel or lubricants, of the type used in filling stations or in garages)
28.25.14.10	Machinery and apparatus for filtering or purifying air (excluding intake filters for internal combustion engines)
28.25.14.30	Machinery and apparatus for filtering and purifying gases (other than air and excluding those which operate using a catalytic process, and isotope separators)
28.25.14.40	Machinery and apparatus for filtering or purifying gases by catalytic process (excluding intake air filters for internal combustion engines, machinery and apparatus for filtering or purifying air)
28.25.14.50	Machinery and apparatus for filtering and purifying gases with stainless steel housing, and with inlet and outlet tube bores with inside diameters not exceeding 1,3 cm (excluding intake filters for internal combustion engines)
29.10.21.00	Vehicles with only spark-ignition engine of a cylinder capacity <= 1 500 cm³
29.10.22.30	Motor vehicles with only petrol engine > 1 500 cm³ (including motor caravans of a capacity > 3 000 cm³) (excluding vehicles for transporting >= 10 persons, snowmobiles, golf cars and similar vehicles)
29.10.22.50	Motor caravans with only spark-ignition internal combustion reciprocating piston engine of a cylinder capacity > 1 500 cm³ but <= 3 000 cm³
29.10.23.10	Motor vehicles with only diesel or semi-diesel engine <= 1 500 cm³ (excluding vehicles for transporting >=10 persons, snowmobiles, golf cars and similar vehicles)
29.10.23.30	Motor vehicles with only diesel or semi-diesel engine > 1 500 cm³ but <= 2 500 cm³ (excluding vehicles for transporting >=10 persons, motor caravans, snowmobiles, golf cars and similar vehicles)

29.10.23.40	Motor vehicles with only diesel or semi-diesel engine > 2 500 cm <sup>3</sup> (excluding vehicles for transporting >= 10 persons, motor caravans, snowmobiles, golf cars and similar vehicles)
29.10.23.53	Motor caravans with only compression-ignition internal combustion piston engine (diesel or semi-diesel) of a cylinder capacity > 1 500 cm <sup>3</sup> but <= 2 500 cm <sup>3</sup>
29.10.23.55	Motor caravans with only compression-ignition internal combustion piston engine (diesel or semi-diesel) of a cylinder capacity > 2 500 cm <sup>3</sup>
29.10.24.10	Motor vehicles, with both spark-ignition or compression-ignition internal combustion reciprocating piston engine and electric motor as motors for propulsion, other than those capable of being charged by plugging to external source of electric power
29.10.24.30	Motor vehicles, with both spark-ignition or compression-ignition internal combustion reciprocating piston engine and electric motor as motors for propulsion, capable of being charged by plugging to external source of electric power
29.10.24.50	Motor vehicles, with only electric motor for propulsion
29.10.24.90	Other motor vehicles for the transport of persons (excluding vehicles with only electric motor for propulsion, vehicles for transporting >= 10 persons, snowmobiles, golf cars and similar vehicles)
29.10.52.00	Motor vehicles specially designed for travelling on snow, golf cars and similar vehicles
29.10.59.90	Other special-purpose motor vehicles n.e.c.
30.92.20.30	Invalid carriages not mechanically propelled
30.92.20.90	Invalid carriages motorised or mechanically propelled
32.50.11.30	Dental drill engines, whether or not combined on a single base with other dental equipment
32.50.11.50	Instruments and appliances used in dental sciences (excluding drill engines)
32.50.12.00	Medical, surgical or laboratory sterilisers
32.50.13.11	Syringes, with or without needles, used in medical, surgical, dental or veterinary sciences
32.50.13.13	Tubular metal needles, for medical, surgical, dental or veterinary sciences
32.50.13.15	Needles for sutures used in medical, surgical, dental or veterinary sciences
32.50.13.17	Needles, catheters, cannulae and the like used in medical, surgical, dental or veterinary sciences (excluding tubular metal needles and needles for sutures)
32.50.13.20	Ophthalmic instruments and appliances
32.50.13.33	Instruments and apparatus for measuring blood-pressure (including sphygmomanometers, tensiometers, oscillometers)
32.50.13.35	Endoscopes for medical purposes
32.50.13.40	Clinical or veterinary thermometers, liquid filled, for direct reading (excluding those combined with other instruments)
32.50.13.53	Renal dialysis equipment
32.50.13.55	Diathermic apparatus (including ultrasonic)
32.50.13.63	Transfusion apparatus (excluding special blood storage glass bottles)
32.50.13.65	Anaesthetic apparatus and instruments
32.50.13.70	Instruments and appliances used in medical, surgical or veterinary sciences, n.e.s.
32.50.21.80	Ozone therapy, oxygen therapy, aerosol therapy, respiration apparatus
32.50.30.50	Medical, surgical or veterinary furniture, and parts thereof (excluding tables and seats specialised for X-ray purposes)
32.50.42.90	Spectacles, goggles and the like, corrective, protective or other (excluding sunglasses)
32.50.50.20	Gel preparations for use in human or veterinary medicine as a lubricant for surgical operations or physical examinations or as a coupling agent between the body and medical instruments
32.50.50.30	Sterile surgical or dental adhesion barriers, whether or not absorbable; sterile suture materials, including sterile absorbable surgical or dental yarns (excluding catgut); sterile tissue adhesives for surgical wound closure; sterile laminaria and sterile laminaria tents; sterile absorbable surgical or dental haemostatics
32.99.59.10	Breathing appliances and gas masks (excluding therapeutic respiration apparatus and protective masks having neither mechanical parts nor replaceable filters)

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Source: Authors' elaboration

**Annex 4 - COVID-19 economic activities according to the NACE Rev. 2 classification**

Division	Class	Title
08		Other mining and quarrying
	08.93	Extraction of salt
10		Manufacture of food products
	10.84	Manufacture of condiments and seasonings
11		Manufacture of beverages
	11.01	Distilling, rectifying and blending of spirits
13		Manufacture of textiles
	13.92	Manufacture of made-up textile articles, except apparel
14		Manufacture of wearing apparel
	14.19	Manufacture of other wearing apparel and accessories
17		Manufacture of paper and paper products
	17.22	Manufacture of household and sanitary goods and of toilet requisites
20		Manufacture of chemicals and chemical products
	20.11	Manufacture of industrial gases
	20.13	Manufacture of other inorganic basic chemicals
	20.14	Manufacture of other organic basic chemicals
	20.16	Manufacture of plastics in primary forms
	20.20	Manufacture of pesticides and other agrochemical products
	20.41	Manufacture of soap and detergents, cleaning and polishing preparations
	20.42	Manufacture of perfumes and toilet preparations
	20.59	Manufacture of other chemical products n.e.c.
21		Manufacture of basic pharmaceutical products and pharmaceutical preparations
	21.10	Manufacture of basic pharmaceutical products
	21.20	Manufacture of pharmaceutical preparations
22		Manufacture of rubber and plastic products
	22.19	Manufacture of other rubber products
	22.22	Manufacture of plastic packinggoods
	22.29	Manufacture of other plastic products
23		Manufacture of other non-metallic mineral products
	23.19	Manufacture and processing of other glass, including technical glassware
25		Manufacture of fabricated metal products, except machinery and equipment
	25.29	Manufacture of other tanks, reservoirs and containers of metal
	25.99	Manufacture of other fabricated metal products n.e.c.
26		Manufacture of computer, electronic and optical products
	26.51	Manufacture of instruments and appliances for measuring, testing and navigation
	26.60	Manufacture of irradiation, electromedical and electrotherapeutic equipment
	26.70	Manufacture of optical instruments and photographic equipment
28		Manufacture of machinery and equipment n.e.c.
	28.13	Manufacture of other pumps and compressors
	28.25	Manufacture of non-domestic cooling and ventilation equipment
29		Manufacture of motor vehicles, trailers and semi-trailers
	29.10	Manufacture of motor vehicles
30		Manufacture of other transport equipment
	30.92	Manufacture of bicycles and invalid carriages
32		Other manufacturing
	32.50	Manufacture of medical and dental instruments and supplies
	32.99	Other manufacturing n.e.c.

Source: Authors' elaboration

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