

Plastic Put on Market Calculation (POM) Tool Manual

Plastic Embedded POM Tool

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Abbreviations

CPCD codes	Customs Procedure Codes
WG	Waste Generated
HS Codes	Harmonized System Codes
POM	Put on Market
PEM	Plastic Embedded
PE	Polyethylene
PET	Polyethylene terephthalate
PP	Polypropylene
PS	Polystyrene
PVC	Polyvinyl chloride
PUR	Polyurethane

1. Introduction

The “Plastic Put on the Market (POM) Calculation Tool” is an integral part of the methodologies for the calculation of the weight of plastic POM in countries and an input for the calculation of the weight of plastic waste generated by weight in each country. Moreover, it provides an estimation for the countries of plastic POM per market sector and per type of plastic (i.e. PE, PP, PS, PVC, PET, PUR).

The “Plastic POM Calculation Tool”, more specifically “Plastic Embedded (PEM) POM Calculation Tool”, is used to calculate the total weight of plastic embedded in the products and provides the input sheet to Plastic Waste Generated Tool.

The goal of this manual is to help users to handle, calculate and adapt the data in the Tool and to address possible questions on how the Tool works. Chapter 2, presents an overview of the plastic POM calculation tool with a description of its different sheets. In Chapter 3, the manual provides a guideline to the user on how to operate the Tool to perform different tasks.

The plastic POM calculation tool uses the ‘apparent consumption methodology’ to estimate the weight of plastic for countries and for the desired timeframe. The calculation routines have been developed by United Nations Institute for Training and Research (UNITAR).

The plastic POM calculation tool manual as described in Chapter 3.2 can assist the user to insert POM data using the ‘apparent consumption methodology’ to calculate the relevant quantities of plastic POM per market sector categories as well as per polymer type, as illustrated in Annex 3. The methodology to calculate the total quantity of plastic POM in a given year for a specific country is based on:

- the amount of plastic imported (using HS codes)
- the amount of plastic exported (using HS codes)
- the amount of plastic domestically produced (using CPC codes).

2. Overview of the Plastic POM Calculation Tool

The Plastic Embedded POM Calculation Tool contains 17 different sheets. All of them are essential for the proper functioning of the tool. Most sheets are hidden by default to prevent accidental changes which will cause wrong calculations. The table below presents the different sheets of the Plastic POM calculation tool and explains their purpose.

Table 1 Overview of the sheets of the Plastic POM calculation tool

Name of the sheet	Description
FrontPage	User interface
POM_APP_CONS_PEM	Time series (1980-2030) put on market data per PlasticKEY
POM_to_Tool_inputations	The substitution of estimated values for missing or inconsistent data items
POM_to_Tool	The final calculation results of POM POM_to_Tool is the input sheet to Plastic Waste Generated Tool.
POM_by sector by polymer	Plastic embedded POM by polymer in different economic sectors
<i>The following sheets are hidden, it can be made visible by clicking on the “show sheets” button.</i>	
HS_PlasticKEY	Correspondence tables of HS codes and PlasticKEYs, and CPC codes and PlasticKEYs
Input_HScode	Sheet used for entering plastic import, and export data based on the HS codes of a country under investigation
Weight_Year_HS	Average weight and plastic fraction of plastic product per HS code for chosen year A sheet for converting plastic import and export in “piece/unit” or “kg” to tonnes
Input_CPCcode	Sheet used for entering plastic domestic production data based on the CPC codes of a country under investigation
Weight_Year_CPC	Average weight and plastic fraction of plastic product per CPC code for chosen year A sheet for converting plastic domestic production in “piece/unit” or “kg” to tonnes
Import_timeseries_PEM	Time series import data per HS code
Export_timeseries_PEM	Time series export data per HS code
CPC_timeseries_PEM	Time series domestic production data per CPC code

CPC_PlasticKEY_PEM	Time series domestic production data per PlasticKEY
Import_PlasticKEY_PEM	Time series import data per PlasticKEY
Export_PlasticKEY_PEM	Time series export data per PlasticKEY
PlasticKEY by sector by polymer	Polymer composition of each PlasticKEY for chosen years

Do not **relocate**, **insert**, or **change** the individual order of the sheets in the Plastic POM Calculation Tool. This will result in the malfunction of the **Show Sheets** action button on the “FrontPage”. All other sheets are used for data storage, calculations and intermediate results and must not be modified by the user.

When there is missing or incorrect data points, the user can use “POM_to_Tool_imputations” to modify. The plastic POM calculation tool is developed in Excel 2019 as a “.xlsm” spreadsheet. It is designed as basic as possible to operate across different platforms and is downward compatible with all versions of Excel.

3. Using the Plastic POM Calculation Tool

The "FrontPage" sheets (the first sheet of the Plastic Embedded POM calculation tool and user interphase) contains four buttons that will allow the user to perform all necessary actions.

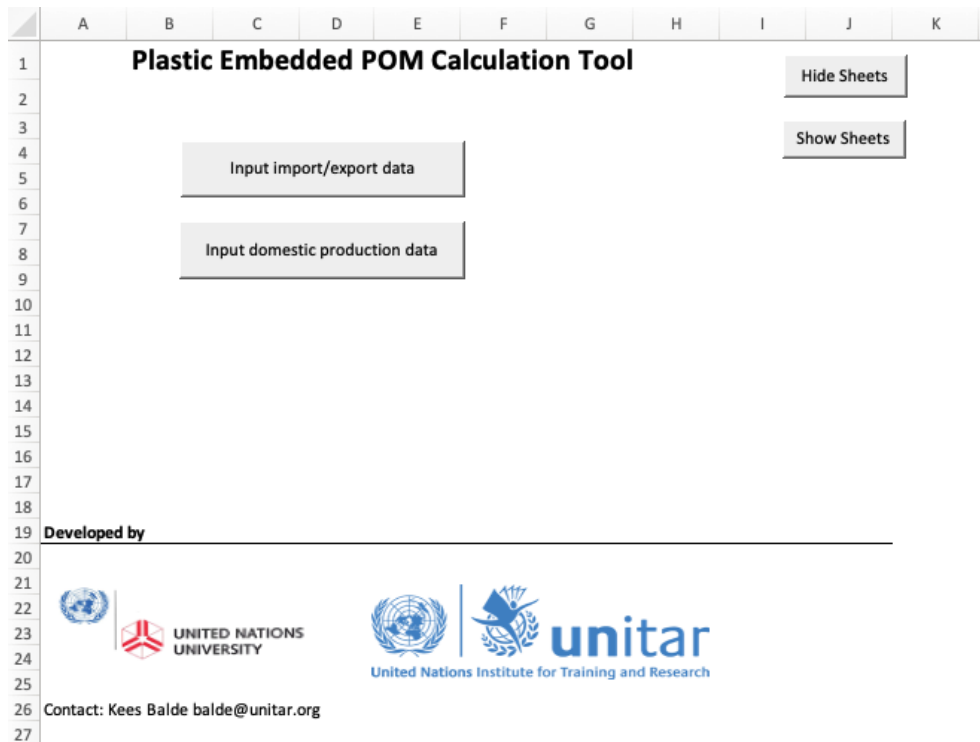


Figure 1 The "FrontPage" sheets of the Plastic POM calculation tool

3.1. Hide/Show sheets

In order to prevent accidental changes to certain sheets, some sheets are hidden by default. However, it is possible to make these sheets visible by clicking on the **Show Sheets** button.

Clicking on the **Hide Sheets** button will hide the sheets again and only 4 out of 17 sheets will be unhidden.

3.2. Plastic POM tool functionalities

The plastic POM data can be calculated by entering the countries plastic import, export and domestic data. The user should use the HS codes for imports and export data, and CPC codes for domestic production to calculate the quantity of plastic POM based on production and trade statistics. The script in the Tools use the 'apparent consumption methodology' to calculate the quantity of plastics POM for a country of reference.

3.2.1 Entering import and export plastic data

As a first step, the user should enter the countries plastic import and export data by clicking on the button **Input export/import data** on the “Front Page” of the Tool. Once the user has clicked the **Input export/import data** button, a pop-up window will appear requesting the user to specify the year of data which they feed into the Tool. The year should be entered as a four-digit number (e.g. 1995). Valid years are from 1980 to 2030.

Once the year has been specified, the user will be re-directed to the “Input_HSCode” sheet where they should enter import (column “C”) and export (column “D”) data per HS code (Column “A”) as seen in Figure 2.

HS	Full name	IMPORT	EXPORT	UNIT	Possible Units	Plastic-KEY	CONVERTED UNITS (t)	
							IMPORT	EXPORT
392310	Boxes, cases, crates and similar articles for the conveyance or packaging of goods, of plastics			kg	p/unit or kg	Boxes, cases, crates and si	0	0
392330	Carboys, bottles, flasks and similar articles for the conveyance or packaging of goods, of plastics			p/unit	p/unit or kg	Carboys, bottles, flasks an	0	0
392321	Sacks and bags, incl. cones, of polymers of ethylene			kg	p/unit or kg	Sacks and bags, incl. cone	0	0
392329	Sacks and bags, incl. cones, of plastics (excl. those of polymers of ethylene)			kg	p/unit or kg	Sacks and bags, incl. cone	0	0
200911	Frozen orange juice, unfermented, whether or not containing added sugar or other sweetening matter (excl. containing spirit)			kg	p/unit or kg	Frozen orange juice, unfer	0	0
200912	Orange juice, unfermented, Brix value ≤ 20 at 20→C, whether or not containing added sugar or other sweetening matter (excl. containing spirit and frozen)			kg	p/unit or kg	Orange juice, unfermente	0	0
200919	Orange juice, unfermented, whether or not containing added sugar or other sweetening matter (excl. containing spirit, frozen, and of a Brix value ≤ 20 at 20→C)			kg	p/unit or kg	Orange juice, unfermente	0	0
200921	Grapefruit juice, unfermented, Brix value ≤ 20 at 20→C, whether or not containing added sugar or other sweetening matter (excl. containing spirit)			kg	p/unit or kg	Grapefruit juice, unferme	0	0
200929	Grapefruit juice, unfermented, Brix value > 20 at 20→C, whether or not containing added sugar or other sweetening matter (excl. containing spirit)			kg	p/unit or kg	Grapefruit juice, unferme	0	0

Figure 2 Filling in import and export data

The user should enter the export and import data per HS codes in the units as suggested in columns “G” and “I”.

The user should specify in Column “E” the units of the import and export data corresponds to. The Tool provides the user with a prefilled standard unit (i.e. units in column “E”). However, the user has the option of using the units illustrated in columns “G” and “I” as well. To confirm import and export data in the plastic POM calculation tool, click on the **Continue** button. The data (i.e. column “C” and “D”) and unit (i.e. column “E”) are then verified for completeness and valid numbers. If invalid input is found, an error message will present as shown in Figure 3. For columns “C” (import) and “D” (Export) a value will be considered an “invalid value” if is not a numeric character (e.g. “.”, “@”, “/” etc). For column “E”, a value will be considered incorrect when the unit or format differs from the options provided in columns “G” and “I”. After making the aforementioned correction, the user can proceed to click on the **Continue** button again.

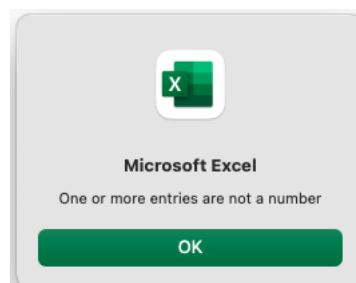


Figure 3 Example of an error message for invalid entries

In case the user wishes to cancel data inputs the **Cancel** button should be pressed.

Once the information has been validated and found in the correct format, the POM plastic calculation tool will automatically convert the data to kg per PlasticKey and store it in the “Import_timeseries_PEM”, “Export_timeseries_PEM”, “Import_PlasticKEY_PEM”, and “Export_PlasticKEY_PEM” sheets. Afterwards, the user will be redirected to the “Frontpage” (user interphase).

In the case the country has domestic production, the user should include it as indicated in section 3.2.2.

In the case the country has no plastic production, the user can already find the calculation results in the sheet “POM_to_Tool” sheet, and “POM_by sector by polymer” sheet for PEM POM Calculation Tool.

3.2.2 Entering domestic data

As a second step, the user should enter the countries’ plastic domestic production data by clicking on the button **Input domestic production data** on the “Front Page” of the Tool. Once the user has clicked the **Input domestic production data** button, a pop-up window will appear requesting the user to specify the year of data they which to feed into the Tool. The year should be entered as a four-digit number (e.g. 1995). Valid years are from 1980 to 2030.

Once the year has been specified, the user will be re-directed to the “Input_CPCcode” sheet where they should enter domestic production (column “C”) data per CPC code (Column “A”) as seen in Figure 4.

Code No.	Description	DOMESTIC PRODUCTION	UNIT (from Activity 2)	Possible Units	CONVERTED UNITS (t) Domestic production
36490	Other articles for the conveyance or packing of goods, of plastics; stoppers, lids, caps and other closures, of plastics		p/unit	p/unit or kg	0
56410	Sacks and bags, of plastics		kg	p/unit or kg	0
1321	Tomato juice		kg	p/unit or kg	0
1329	Other vegetable juices		kg	p/unit or kg	0
1431	Orange juice		kg	p/unit or kg	0
1432	Grapefruit juice		kg	p/unit or kg	0
1433	Pineapple juice		kg	p/unit or kg	0
1434	Grape juice		kg	p/unit or kg	0
1435	Apple juice		kg	p/unit or kg	0
21439	Other fruit juices, n.e.c.		kg	p/unit or kg	0
7300	Steam and hot water		kg	p/unit or kg	0
4410	Bottled waters, not sweetened or flavoured		l	l or kg	0
4490	Other non-alcoholic caloric beverages		l	l or kg	0
9511	Rail locomotives powered from an external source of electricity		p/unit	p/unit or kg	0
9512	Diesel-electric locomotives		kg	p/unit or kg	0

Figure 4 Filling in domestic production data

The user should enter domestic production data per CPC codes in the units as suggested in columns “F” and “H”.

The user should specify in Column “D” the units of the domestic production data corresponds to. The Tool provides the user with a prefilled standard unit (i.e. units in column “D”), however, the user has the option of using the units illustrated in columns “F” and “H” as well. To confirm the domestic production data in the plastic POM calculation tool, click on the **Continue** button. The data (inserted in column “C”) and unit (inserted in column “D”) are then verified for completeness and valid numbers. If invalid input is found, the an error message will present as shown in Figure 3. For column “C” (domestic production data) a value will be considered “invalid value” if is not a numeric character (e.g.

“.”, “@”, “/” etc). For column “D” (unit) a value will be considered incorrect when the unit or format differs from the options provided in columns “F” and “H”. After making the aforementioned correction, the user can proceed to click on the **Continue** button again.

In case the user wishes to cancel data inputs the **Cancel** button should be pressed.

Once the information has been validated and found in the correct format the POM plastic calculation tool will automatically convert the data in kg per plastic Key and store it in “CPC_timeseries_PEM” and “CPC_PlasticKEY_PEM” sheets. Afterwards, the user will be redirected to the “Frontpage” (user interphase).

3.2.3 Calculation of POM

Once the user has entered the import, export and domestic production data for the reference year, the Tool can calculate the quantity of plastic POM using the apparent consumption methodology:

$$POM = Import - Export + Domestic Production \quad \text{Equation 1}$$

In the case a country does not have plastic domestic production, the user can disregard inserting information on domestic production, and the calculation is done when the import and export data are filled. The tool uses the following equation to calculate the plastic POM of the country:

$$POM = Import - Export \quad \text{Equation 2}$$

For the Plastic Embedded POM Calculation Tool, there is one extra calculation step:

$$\begin{aligned} \text{Plastic Embedded POM} \\ = f_{HS} * Import - f_{HS} * Export + f_{CPC} * Domestic Production \end{aligned} \quad \text{Equation 3}$$

where f_{HS} represents the plastic fraction in each HS code, and f_{CPC} represents the plastic fraction in each CPC code.

The Tool automatically calculates after the data have been successfully filled. Figure 5 shows the “Success” notification, which also represents the Tool has finished calculation.

In the case the country has no plastic production, the calculation is done when the import and export data have been filled, and the “Success” notification is shown. The user can find the calculation results in the sheet “POM_to_Tool” sheet and “POM_by sector by polymer” sheet.

In the case the country has domestic production, the calculation is done after filling in import and export data and domestic production data. “Success” notification would show twice in this case, once after filling in the import and export data, once after filling in the domestic production data. The user can find the calculation results in the sheet “POM_to_Tool” sheet and “POM_by sector by polymer” sheet.

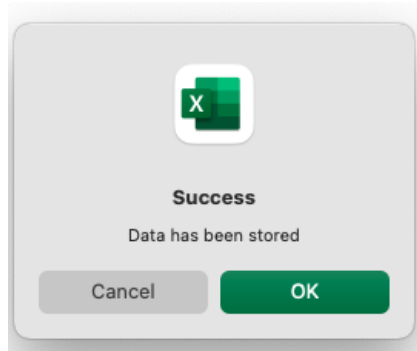


Figure 5 Notification of successful data filling

All consolidated information can be found in:

- “POM_to_Tool” sheet: POM calculation results of plastic embedded in products. **The sheet can be copied and pasted directly to “POM” sheet in Plastic Waste Generated Tool.**
- “POM_by sector by polymer” sheet: Plastic embedded POM by polymer in different economic sectors.

3.2.4 Performing a statistical analysis prior to inserting the Put on Market data into the Plastic Waste Generated Calculation Tool

Prior to inserting the plastic Put on Market data into the Plastic Waste Generated Tool, it is of paramount importance to perform a statistical analysis of the obtained data to check its reliability and accuracy. The statistical analysis should as a minimum criterion include the following:

- detection of possible outliers;
- imputation steps for missing data points; and
- an analysis of the trends of the time series.

3.2.5 Calculation of the plastic waste generated from the Plastic Waste Generated Calculation Tool

Once the data from the “POM_to_Tool” sheet of the Plastic POM calculation Tool has been analysed, polished, refined and further estimated, the user can copy it into the “POM” sheet of the Plastic Waste Generated Calculation Tool. More instructions on using Plastic Waste Generated Calculation Tool can be found in “Plastic Waste Generated Tool Manual”.

Annex 1: Correspondence table between the Plastic-Keys and HS code

Plastic-Key	Plastic-Key Description	HS Code	HS Description
P101	Boxes, cases, crates and similar packing articles, of plastics	3923.10	Boxes, cases, crates and similar articles for the conveyance or packaging of goods, of plastics
P101	Boxes, cases, crates and similar packing articles, of plastics	3923.30	Carboys, bottles, flasks and similar articles for the conveyance or packaging of goods, of plastics
P102	Sacks and bags, of plastics	3923.21	Sacks and bags, incl. cones, of polymers of ethylene
P102	Sacks and bags, of plastics	3923.29	Sacks and bags, incl. cones, of plastics (excl. those of polymers of ethylene)
P103	Juices	2009.11	Frozen orange juice, unfermented, whether or not containing added sugar or other sweetening matter (excl. containing spirit)
P103	Juices	2009.12	Orange juice, unfermented, Brix value \leq 20 at 20 $^{\circ}$ C, whether or not containing added sugar or other sweetening matter (excl. containing spirit and frozen)
P103	Juices	2009.19	Orange juice, unfermented, whether or not containing added sugar or other sweetening matter (excl. containing spirit, frozen, and of a Brix value \leq 20 at 20 $^{\circ}$ C)
P103	Juices	2009.21	Grapefruit juice, unfermented, Brix value \leq 20 at 20 $^{\circ}$ C, whether or not containing added sugar or other sweetening matter (excl. containing spirit)
P103	Juices	2009.29	Grapefruit juice, unfermented, Brix value $>$ 20 at 20 $^{\circ}$ C, whether or not containing added sugar or other sweetening matter (excl. containing spirit)
P103	Juices	2009.31	Single citrus fruit juice, unfermented, Brix value \leq 20 at 20 $^{\circ}$ C, whether or not containing added sugar or other sweetening matter (excl. containing spirit, mixtures, orange juice and grapefruit juice)
P103	Juices	2009.39	Single citrus fruit juice, unfermented, Brix value $>$ 20 at 20 $^{\circ}$ C, whether or not containing added sugar or other sweetening matter (excl. containing spirit, mixtures, orange juice and grapefruit juice)
P103	Juices	2009.41	Pineapple juice, unfermented, Brix value \leq 20 at 20 $^{\circ}$ C, whether or not containing added sugar or other sweetening matter (excl. containing spirit)
P103	Juices	2009.49	Pineapple juice, unfermented, Brix value $>$ 20 at 20 $^{\circ}$ C, whether or not containing added sugar or other sweetening matter (excl. containing spirit)
P103	Juices	2009.50	Tomato juice, unfermented, whether or not containing added sugar or other sweetening matter (excl. containing spirit)
P103	Juices	2009.61	Grape juice, incl. grape must, unfermented, Brix value \leq 30 at 20 $^{\circ}$ C, whether or not containing added sugar or other sweetening matter (excl. containing spirit)
P103	Juices	2009.69	Grape juice, incl. grape must, unfermented, Brix value $>$ 30 at 20 $^{\circ}$ C, whether or not containing added sugar or other sweetening matter (excl. containing spirit)

P103	Juices	2009.71	Apple juice, unfermented, Brix value ≤ 20 at 20–∞C, whether or not containing added sugar or other sweetening matter (excl. containing spirit)
P103	Juices	2009.79	Apple juice, unfermented, Brix value > 20 at 20–∞C, whether or not containing added sugar or other sweetening matter (excl. containing spirit)
P103	Juices	2009.81	Cranberry "Vaccinium macrocarpon, Vaccinium oxycoccos, Vaccinium vitis-idaea" juice, unfermented, whether or not containing added sugar or other sweetening matter (excl. containing spirit)
P103	Juices	2009.89	Juice of fruit or vegetables, unfermented, whether or not containing added sugar or other sweetening matter (excl. containing spirit, mixtures, and juice of citrus fruit, pineapples, tomatoes, grapes, incl. grape must, apples and cranberries)
P103	Juices	2009.90	Mixtures of fruit juices, incl. grape must, and vegetable juices, unfermented, whether or not containing added sugar or other sweetening matter (excl. containing spirit)
P104	Mineral waters and aerated waters	2201.10	Mineral waters and aerated waters, not containing added sugar, other sweetening matter or flavoured
P104	Mineral waters and aerated waters	2201.90	Ordinary natural water, not containing added sugar, other sweetening matter or flavoured; ice and snow (excl. mineral waters and aerated waters, sea water, distilled water, conductivity water or water of similar purity)
P105	Soft drinks, excluding water and fruit juices	2202.10	Waters, incl. mineral and aerated, with added sugar, sweetener or flavour, for direct consumption as a beverage
P201	Locomotives	8601.10	Rail locomotives powered from an external source of electricity
P201	Locomotives	8601.20	Rail locomotives powered by electric accumulators
P201	Locomotives	8602.10	Diesel-electric locomotives
P201	Locomotives	8602.90	Rail locomotives (excl. those powered from an external source of electricity or by accumulators and diesel-electric locomotives)
P202	Railway or tramway coaches, self-propelled	8603.10	Self-propelled railway or tramway coaches, vans and trucks, powered from an external source of electricity (excl. those of heading 8604)
P202	Railway or tramway coaches, self-propelled	8603.90	Self-propelled railway or tramway coaches, vans and trucks (excl. those powered from an external source of electricity and those of heading 8604)
P202	Railway or tramway coaches, self-propelled	8604.00	Railway or tramway maintenance or service vehicles, whether or not self-propelled, e.g., workshops, cranes, ballast tampers, trackliners, testing coaches and track inspection vehicles
P202	Railway or tramway coaches, self-propelled	8605.00	Railway or tramway passenger coaches, luggage vans, post office coaches and other special purpose railway or tramway coaches (excl. self-propelled railway or tramway coaches, vans and trucks, railway or tramway maintenance or service vehicles and goods vans and wagons)
P203	Railway or tramway goods vans and wagons, not self-propelled	8606.10	Railway or tramway tank wagons and the like (excl. self-propelled)

P203	Railway or tramway goods vans and wagons, not self-propelled	8606.30	Railway or tramway self-discharging goods vans and wagons (excl. tank wagons and the like and insulated or refrigerated goods vans and wagons)
P203	Railway or tramway goods vans and wagons, not self-propelled	8606.91	Railway or tramway goods vans and wagons, covered and closed (excl. self-discharging goods vans and wagons and tank wagons and the like)
P203	Railway or tramway goods vans and wagons, not self-propelled	8606.92	Railway or tramway goods vans and wagons, open, with non-removable sides of a height > 60 cm (excl. self-discharging wagons)
P203	Railway or tramway goods vans and wagons, not self-propelled	8606.99	Railway or tramway goods vans and wagons (excl. those specially designed for the transport of highly radioactive materials, tank wagons and the like, insulated, refrigerated or self-discharging goods vans and wagons and open goods vans and wagons with non-removable sides of a height > 60 cm)
P204	Tractors	8701.10	Pedestrian-controlled agricultural tractors and similar tractors for industry (excl. tractor units for articulated lorries)
P204	Tractors	8701.20	Road tractors for semi-trailers
P204	Tractors	8701.30	Track-laying tractors (excl. pedestrian-controlled)
P204	Tractors	8701.91	Tractors, of an engine power ≤ 18 kW (excl. those of heading 8709, pedestrian-controlled tractors, road tractors for semi-trailers and track-laying tractors)
P204	Tractors	8701.92	Tractors, of an engine power > 18 kW but ≤ 37 kW (excl. those of heading 8709, pedestrian-controlled tractors, road tractors for semi-trailers and track-laying tractors)
P204	Tractors	8701.93	Tractors, of an engine power > 37 kW but ≤ 75 kW (excl. those of heading 8709, pedestrian-controlled tractors, road tractors for semi-trailers and track-laying tractors)
P204	Tractors	8701.94	Tractors, of an engine power > 75 kW but ≤ 130 kW (excl. those of heading 8709, pedestrian-controlled tractors, road tractors for semi-trailers and track-laying tractors)
P204	Tractors	8701.95	Tractors, of an engine power > 130 kW (excl. those of heading 8709, pedestrian-controlled tractors, road tractors for semi-trailers and track-laying tractors)
P205	Public-transport type passenger motor vehicles	8702.10	Motor vehicles for the transport of ≥ 10 persons, incl. driver, with only diesel engine
P205	Public-transport type passenger motor vehicles	8702.20	Motor vehicles for the transport of ≥ 10 persons, incl. driver, with both diesel engine and electric motor as motors for propulsion
P205	Public-transport type passenger motor vehicles	8702.30	Motor vehicles for the transport of ≥ 10 persons, incl. driver, with both spark-ignition internal combustion reciprocating piston engine and electric motor as motors for propulsion
P205	Public-transport type passenger motor vehicles	8702.40	Motor vehicles for the transport of ≥ 10 persons, incl. driver, with only electric motor for propulsion
P205	Public-transport type passenger motor vehicles	8702.90	Motor vehicles for the transport of ≥ 10 persons, incl. driver (excl. with diesel engine or electric motor for propulsion)

P205	Public-transport type passenger motor vehicles	8703.10	Vehicles for the transport of <10 persons on snow; golf cars and similar vehicles
P206	Passenger cars	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 ≤ 1.000 cm ³ (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)
P206	Passenger cars	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 ³ but ≤ 1.500 cm ³ (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)
P206	Passenger cars	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 ³ but ≤ 3.000 cm ³ (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)
P206	Passenger cars	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 ³ (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)
P206	Passenger cars	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 ³ (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)
P206	Passenger cars	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 ³ but ≤ 2.500 cm ³ (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)
P206	Passenger cars	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 ³ (excl. vehicles for travelling on snow and other specially designed vehicles of subheading 8703.10)
P206	Passenger cars	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)
P206	Passenger cars	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)
P206	Passenger cars	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)
P206	Passenger cars	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)
P206	Passenger cars	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)
P206	Passenger cars	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)
P207	Trucks	8704.10	Dumpers for off-highway use
P207	Trucks	8704.21	Motor vehicles for the transport of goods, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" of a gross vehicle weight ≤ 5 t (excl. dumpers for off-highway use of subheading 8704.10 and special purpose motor vehicles of heading 8705)
P207	Trucks	8704.22	Motor vehicles for the transport of goods, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" of a gross vehicle weight > 5 t but ≤ 20 t (excl. dumpers for off-highway use of subheading 8704.10 and special purpose motor vehicles of heading 8705)
P207	Trucks	8704.23	Motor vehicles for the transport of goods, with compression-ignition internal combustion piston engine "diesel or semi-diesel engine" of a gross vehicle weight > 20 t (excl. dumpers for off-highway use of subheading 8704.10 and special purpose motor vehicles of heading 8705)
P207	Trucks	8704.31	Motor vehicles for the transport of goods, with spark-ignition internal combustion piston engine, of a gross vehicle weight ≤ 5 t (excl. dumpers for off-highway use of subheading 8704.10 and special purpose motor vehicles of heading 8705)
P207	Trucks	8704.32	Motor vehicles for the transport of goods, with spark-ignition internal combustion piston engine, of a gross vehicle weight > 5 t (excl. dumpers for off-highway use of subheading 8704.10 and special purpose motor vehicles of heading 8705)
P207	Trucks	8704.90	Motor vehicles for the transport of goods, with engines other than internal combustion piston engine (excl. dumpers for off-highway use of subheading 8704.10 and special purpose motor vehicles of heading 8705)
P208	Special-purpose motor vehicles n.e.c.	8705.10	Crane lorries (excl. breakdown lorries)
P208	Special-purpose motor vehicles n.e.c.	8705.20	Mobile drilling derricks

P208	Special-purpose motor vehicles n.e.c.	8705.30	Fire fighting vehicles (excl. vehicles for transporting persons)
P208	Special-purpose motor vehicles n.e.c.	8705.40	Concrete-mixer lorries
P209	Fork-lift trucks and other works trucks; tractors of the type used on railway station platforms	8709.11	Electrical vehicles not fitted with lifting or handling equipment, of the type used in factories, warehouses, dock areas or airports for short distance transport of goods; tractors of the type used on railway station platforms
P209	Fork-lift trucks and other works trucks; tractors of the type used on railway station platforms	8709.19	Works trucks, self-propelled, not fitted with lifting or handling equipment, of the type used in factories, warehouses, dock areas or airports for short distance transport of goods; tractors of the type used on railway station platforms (excl. electrical trucks)
P210	Tanks and other armoured fighting vehicles, motorized, and parts thereof	8710.00	Tanks and other armoured fighting vehicles, motorised, whether or not fitted with weapons, and parts of such vehicles, n.e.s.
P211	Motorcycles	8711.10	Motorcycles, incl. mopeds, with reciprocating internal combustion piston engine of a cylinder capacity $\leq 50 \text{ cm}^3$
P211	Motorcycles	8711.20	Motorcycles, incl. mopeds, with reciprocating internal combustion piston engine of a cylinder capacity $> 50 \text{ cm}^3$ but $\leq 250 \text{ cm}^3$
P211	Motorcycles	8711.30	Motorcycles, incl. mopeds, with reciprocating internal combustion piston engine of a cylinder capacity $> 250 \text{ cm}^3$ but $\leq 500 \text{ cm}^3$
P211	Motorcycles	8711.40	Motorcycles, incl. mopeds, with reciprocating internal combustion piston engine of a cylinder capacity $> 500 \text{ cm}^3$ but $\leq 800 \text{ cm}^3$
P211	Motorcycles	8711.50	Motorcycles, incl. mopeds, with reciprocating internal combustion piston engine of a cylinder capacity $> 800 \text{ cm}^3$
P211	Motorcycles	8711.60	Motorcycles, incl. mopeds, and cycles fitted with an auxiliary motor, with electric motor for propulsion
P212	Bicycles	8712.00	Bicycles and other cycles, incl. delivery tricycles, not motorised
P213	Wheelchairs	8713.10	Carriages for disabled persons, not mechanically propelled
P213	Wheelchairs	8713.90	Carriages for disabled persons, motorised or otherwise mechanically propelled (excl. specially designed motor vehicles and bicycles)
P214	Trailers and semi-trailers of the caravan type, for housing or camping	8716.10	Trailers and semi-trailers of the caravan type, for housing or camping
P214	Trailers and semi-trailers of the caravan type, for housing or camping	8716.31	Tanker trailers and tanker semi-trailers, not designed for running on rails
P214	Trailers and semi-trailers of the caravan type, for housing or camping	8716.39	Trailers and semi-trailers for the transport of goods, not designed for running on rails (excl. self-loading or self-unloading trailers and semi-trailers for agricultural purposes and tanker trailers and tanker semi-trailers)

P215	Balloons and dirigibles; gliders, hang gliders and other non-powered aircraft	8801.00	Balloons and dirigibles; gliders, hang gliders and other non-powered aircraft
P216	Helicopters of an unladen weight not exceeding 2,000 kg	8802.11	Helicopters of an unladen weight <= 2.000 kg
P216	Helicopters of an unladen weight not exceeding 2,000 kg	8802.12	Helicopters of an unladen weight > 2.000 kg
P216	Helicopters of an unladen weight not exceeding 2,000 kg	8802.20	Aeroplanes and other powered aircraft of an unladen weight <= 2.000 kg (excl. helicopters and dirigibles)
P216	Helicopters of an unladen weight not exceeding 2,000 kg	8802.30	Aeroplanes and other powered aircraft of an unladen weight > 2.000 kg but <= 15.000 kg (excl. helicopters and dirigibles)
P216	Helicopters of an unladen weight not exceeding 2,000 kg	8802.40	Aeroplanes and other powered aircraft of an of an unladen weight > 15.000 kg (excl. helicopters and dirigibles)
P217	Spacecraft and spacecraft launch vehicles	8802.60	Spacecraft, incl. satellites, and suborbital and spacecraft launch vehicles
P218	Large ships and vessels	8901.10	Cruise ships, excursion boats and similar vessels principally designed for the transport of persons; ferry-boats of all kinds
P218	Large ships and vessels	8901.20	Tankers
P218	Large ships and vessels	8901.30	Refrigerated vessels (excl. tankers)
P218	Large ships and vessels	8901.90	Vessels for the transport of goods and vessels for the transport of both persons and goods (excl. refrigerated vessels, tankers, ferry-boats and vessels principally designed for the transport of persons)
P218	Large ships and vessels	8902.00	Fishing vessels; factory ships and other vessels for processing or preserving fishery products (excl. fishing boats for sport)
P219	(Intentionally empty) (to be updated)		
P220	Vessels for pleasure and sports	8903.10	Inflatable vessels for pleasure or sports
P220	Vessels for pleasure and sports	8903.91	Sailboats and yachts, with or without auxiliary motor, for pleasure or sports
P220	Vessels for pleasure and sports	8903.92	Motor boats and motor yachts, for pleasure or sports (other than outboard motor boats)
P220	Vessels for pleasure and sports	8903.99	Vessels for pleasure or sports; rowing boats (excl. motor boats and motor yachts powered other than by outboard motors, sailboats and yachts with or without auxiliary motor and inflatable boats)
P220	Vessels for pleasure and sports	8904.00	Tugs and pusher craft
P221	Other vessels	8905.10	Dredgers
P221	Other vessels	8905.20	Floating or submersible drilling or production platforms
P221	Other vessels	8905.90	Light-vessels, fire-floats, floating cranes and other vessels, the navigability of which is subsidiary to their main function (excl.

			dredgers, floating or submersible drilling or production platforms; fishing vessels and warships)
P221	Other vessels	8906.10	Warships of all kinds
P221	Other vessels	8906.90	Vessels, incl. lifeboats (excl. warships, rowing boats and other vessels of heading 8901 to 8905 and vessels for breaking up)
P222	Rafts, tanks, coffer-dams, landing stages, buoys, beacons and other floating structures	8907.10	Inflatable rafts
P222	Rafts, tanks, coffer-dams, landing stages, buoys, beacons and other floating structures	8907.90	Rafts, tanks, coffer-dams, landing stages, buoys, beacons and other floating structures (excl. inflatable rafts, vessels of heading 8901 to 8906 and floating structures for breaking up)
P301	Carpets and other textile floor coverings, woven, not tufted or flopped	5702.32	Carpets and other floor coverings, of man-made textile materials, woven, not tufted or flopped, of pile construction, not made up (excl. Kelem, Schumacks, Karamanie and similar hand-woven rugs)
P301	Carpets and other textile floor coverings, woven, not tufted or flopped	5702.42	Carpets and other floor coverings, of man-made textile materials, woven, not tufted or flopped, of pile construction, made up (excl. Kelem, Schumacks, Karamanie and similar hand-woven rugs)
P301	Carpets and other textile floor coverings, woven, not tufted or flopped	5702.92	Carpets and other floor coverings, of man-made textile materials, woven, not tufted or flopped, not of pile construction, made up (excl. Kelem, Schumacks, Karamanie and similar hand-woven rugs)
P302	Carpets and other textile floor coverings, tufted	5703.20	Carpets and other floor coverings, of nylon or other polyamides, tufted "needle punched", whether or not made up
P302	Carpets and other textile floor coverings, tufted	5703.30	Carpets and other floor coverings, of man-made textile materials, tufted "needle punched", whether or not made up (excl. those of nylon or other polyamides)
P303	Other carpets	5705.00	Carpets and other textile floor coverings, whether or not made up (excl. knotted, woven or tufted "needle punched", and of felt)
P304	Embroidery and Lace	5804.21	Mechanically made lace of man-made fibres in the piece, in strips or in motifs (excl. fabrics of headings 6002 to 6006)
P304	Embroidery and Lace	5810.92	Embroidery of man-made fibres on a textile fabric base, in the piece, in strips or in motifs (excl. embroidery without visible ground)
P305	Tubes, pipes and hoses, and fittings therefor, of plastics	3917.21	Rigid tubes, pipes and hoses, of polymers of ethylene
P305	Tubes, pipes and hoses, and fittings therefor, of plastics	3917.22	Rigid tubes, pipes and hoses of polymers of propylene
P305	Tubes, pipes and hoses, and fittings therefor, of plastics	3917.23	Rigid tubes, pipes and hoses, of polymers of vinyl chloride
P305	Tubes, pipes and hoses, and fittings therefor, of plastics	3917.29	Rigid tubes, pipes and hoses, of plastics (excl. those of polymers of ethylene, propylene and vinyl chloride)

P305	Tubes, pipes and hoses, and fittings therefor, of plastics	3917.31	Flexible tubes, pipes and hoses, of plastics, burst pressure \geq 27,6 MPa
P305	Tubes, pipes and hoses, and fittings therefor, of plastics	3917.32	Flexible tubes, pipes and hoses of plastics, not reinforced or otherwise combined with other materials, without fittings
P305	Tubes, pipes and hoses, and fittings therefor, of plastics	3917.33	Flexible tubes, pipes and hoses of plastics, not reinforced or otherwise combined with other materials, with fittings, seals or connectors
P305	Tubes, pipes and hoses, and fittings therefor, of plastics	3917.39	Flexible tubes, pipes and hoses, of plastics, reinforced or otherwise combined with other materials (excl. those with a burst pressure of \geq 27,6 MPa)
P305	Tubes, pipes and hoses, and fittings therefor, of plastics	3917.40	Fittings, e.g. joints, elbows, flanges, of plastics, for tubes, pipes and hoses
P306	Floor coverings of plastics, wall or ceiling coverings of plastics	3918.10	Floor coverings, whether or not self-adhesive, in rolls or in the form of tiles, and wall or ceiling coverings "in rolls with a width of \geq 45 cm, consisting of a layer of plastics fixed permanently on a backing of any material other than paper, the face side of which is grained, embossed, coloured, design-printed or otherwise decorated", of polymers of vinyl chloride
P306	Floor coverings of plastics, wall or ceiling coverings of plastics	3918.90	Floor coverings of plastics, whether or not self-adhesive, in rolls or in the form of tiles, and wall or ceiling coverings in rolls with a width of \geq 45 cm, consisting of a layer of plastics fixed permanently on a backing of any material other than paper, the face side of which is grained, embossed, coloured, design-printed or otherwise decorated (excl. coverings of polymers of vinyl chloride)
P307	Self-adhesive plates, sheets and other flat shapes, of plastics	3919.10	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, in rolls \leq 20 cm wide
P307	Self-adhesive plates, sheets and other flat shapes, of plastics	3919.90	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics, whether or not in rolls $>$ 20 cm wide (excl. floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.10	Plates, sheets, film, foil and strip, of non-cellular polymers of ethylene, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.20	Plates, sheets, film, foil and strip, of non-cellular polymers of ethylene, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly	3920.30	Plates, sheets, foil, film and strip, of non-cellular polymers of styrene, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918)

	combined with other materials		
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.43	Plates, sheets, film, foil and strip, of non-cellular polymers of vinyl chloride, containing by weight \geq 6% of plasticisers, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.49	Plates, sheets, film, foil and strip, of non-cellular polymers of vinyl chloride, containing by weight $<$ 6% of plasticisers, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.51	Plates, sheets, film, foil and strip, of non-cellular poly"methyl methacrylate", not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.59	Plates, sheets, film, foil and strip, of non-cellular acrylic polymers, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. those of poly"methyl methacrylate", self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.61	Plates, sheets, film, foil and strip, of non-cellular polycarbonates, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. those of poly"methyl methacrylate", self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.62	Plates, sheets, film, foil and strip, of non-cellular poly"ethylene terephthalate", not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. those of poly"methyl methacrylate", self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.63	Plates, sheets, film, foil and strip, of non-cellular unsaturated polyesters, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. those of poly"methyl methacrylate", self-adhesive products, and floor, wall and ceiling coverings of heading 3918)

P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.69	Plates, sheets, film, foil and strip, of non-cellular polyesters, not reinforced, laminated, supported or similarly combined with other materials, not worked or only surface-worked, or only cut to rectangular, incl. square, shapes (excl. polycarbonates, polyethylene terephthalate and other unsaturated polyesters, self-adhesive products, and floor, wall and ceiling coverings in heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.71	Plates, sheets, film, foil and strip, of non-cellular regenerated cellulose, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.73	Plates, sheets, film, foil and strip, of non-cellular cellulose acetates, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, and floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.79	Plates, sheets, film, foil and strip, of non-cellular cellulose derivatives, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. products of cellulose acetates, self-adhesive products, floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.91	Plates, sheets, film, foil and strip, of non-cellular poly"vinyl butyral", not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.92	Plates, sheets, film, foil and strip, of non-cellular polyamides, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.93	Plates, sheets, film, foil and strip, of non-cellular amino-resins, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-	3920.94	Plates, sheets, film, foil and strip, of non-cellular phenolic resins, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked

	cellular and not reinforced, laminated, supported or similarly combined with other materials		or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, floor, wall and ceiling coverings of heading 3918)
P308	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	3920.99	Plates, sheets, film, foil and strip, of non-cellular plastics, n.e.s., not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, floor, wall and ceiling coverings of heading 3918 and sterile surgical or dental adhesion barriers of subheading 3006.10.30)
P309	Other plates, sheets, film, foil and strip, of plastics	3921.11	Plates, sheets, film, foil and strip, of cellular polymers of styrene, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, floor, wall and ceiling coverings of heading 3918 and sterile surgical or dental adhesion barriers of subheading 3006.10.30)
P309	Other plates, sheets, film, foil and strip, of plastics	3921.12	Plates, sheets, film, foil and strip, of cellular polymers of vinyl chloride, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, floor, wall and ceiling coverings of heading 3918 and sterile surgical or dental adhesion barriers of subheading 3006.10.30)
P309	Other plates, sheets, film, foil and strip, of plastics	3921.13	Plates, sheets, film, foil and strip, of cellular polyurethanes, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, floor, wall and ceiling coverings of heading 3918 and sterile surgical or dental adhesion barriers of subheading 3006.10.30)
P309	Other plates, sheets, film, foil and strip, of plastics	3921.14	Plates, sheets, film, foil and strip, of regenerated cellular cellulose, unworked or merely surface-worked or merely cut into squares or rectangles (excl. self-adhesive products, floor, wall and ceiling coverings of heading 3918 and sterile surgical or dental adhesion barriers of subheading 3006.10.30)
P309	Other plates, sheets, film, foil and strip, of plastics	3921.19	Plates, sheets, film, foil and strip, of cellular plastic, unworked or merely surface-worked or merely cut into squares or rectangles (excl. those of polymers of styrene, vinyl chloride, polyurethanes and regenerated cellulose, self-adhesive products, floor, wall and ceiling coverings of heading 3918 and sterile surgical or dental adhesion barriers of subheading 3006.10.30)
P309	Other plates, sheets, film, foil and strip, of plastics	3921.90	Plates, sheets, film, foil and strip, of plastics, reinforced, laminated, supported or similarly combined with other materials, unworked or merely surface-worked or merely cut into squares or rectangles (excl. of cellular plastic; self-adhesive products, floor, wall and ceiling coverings of heading 3918)
P310	Plastic sanitary ware (baths, wash-basins etc.)	3922.10	Baths, shower-baths, sinks and washbasins, of plastics
P310	Plastic sanitary ware (baths, wash-basins etc.)	3922.20	Lavatory seats and covers, of plastics
P310	Plastic sanitary ware (baths, wash-basins etc.)	3922.90	Bidets, lavatory pans, flushing cisterns and similar sanitary ware, of plastics (excl. baths, shower-baths, sinks, washbasins, lavatory seats and covers)

P311	Other Builders' ware of plastics n.e.c.	3925.10	Reservoirs, tanks, vats and similar containers, of plastics, with a capacity of > 300 l
P311	Other Builders' ware of plastics n.e.c.	3925.20	Doors, windows and their frames and thresholds for doors, of plastics
P311	Other Builders' ware of plastics n.e.c.	3925.30	Shutters, blinds, incl. Venetian blinds, and similar articles and parts thereof, of plastics (excl. fittings and similar articles)
P311	Other Builders' ware of plastics n.e.c.	3925.90	Building elements for the manufacture of floors, walls, partition walls, ceilings, roofs, etc., of plastics; gutters and accessories of plastics; railings, fences and similar barriers, of plastics; large shelves, for assembly and permanent installation in shops, workshops, etc., of plastics; architectural ornaments, e.g. friezes, of plastics; fittings and similar products for permanent mounting on buildings, of plastics
P4*	Electronic and electrical equipment (Forti et al., 2018)		
P501	Boxes, cases, crates and similar packing articles, of plastics	3923.40	Spools, cops, bobbins and similar supports, of plastics
P501	Boxes, cases, crates and similar packing articles, of plastics	3923.50	Stoppers, lids, caps and other closures, of plastics
P501	Boxes, cases, crates and similar packing articles, of plastics	3923.90	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)
P502	Household articles and toilet articles, of plastics	3924.10	Tableware and kitchenware, of plastics
P502	Household articles and toilet articles, of plastics	3924.90	Household articles and toilet articles, of plastics (excl. tableware, kitchenware, baths, shower-baths, washbasins, bidets, lavatory pans, seats and covers, flushing cisterns and similar sanitary ware)
P503	Office or school supplies of plastics	3926.10	Office or school supplies, of plastics, n.e.s.
P503	Office or school supplies of plastics	3926.30	Fittings for furniture, coachwork and the like, of plastics (excl. building components for permanent mounting on parts of buildings)
P503	Office or school supplies of plastics	3926.40	Statuettes and other ornamental articles, of plastics
P503	Office or school supplies of plastics	3926.90	Articles of plastics and articles of other materials of heading 3901 to 3914, n.e.s (excl. goods of 9619)
P504	Hand tools	8202.10	Handsaws, with working parts of base metal (excl. power-operated saws)
P504	Hand tools	8205.40	Hand-operated screwdrivers
P504	Hand tools	8205.51	Household hand tools, non-mechanical, with working parts of base metal, n.e.s.
P506	Consumer Seats	9401.30	Swivel seats with variable height adjustments (excl. medical, surgical, dental or veterinary, and barbers' chairs)
P506	Consumer Seats	9401.40	Seats, convertible into beds (excl. garden seats and camping equipment, and medical, dental or surgical furniture)

P507	Electric table, desk, bedside or floor standing lamp	9405.50	Non-electrical lamps and lighting fittings, n.e.s.
P508	Luggage, handbags, travel sets and similar articles	9605	Travel sets for personal toilet, sewing or shoe or clothes cleaning (excl. manicure sets)
P509	Pens, stylos, pen-holders, pencil-holders and similar holders	9608.10	Ball-point pens
P509	Pens, stylos, pen-holders, pencil-holders and similar holders	9608.20	Felt-tipped and other porous-tipped pens and markers
P509	Pens, stylos, pen-holders, pencil-holders and similar holders	9608.30	Fountain pens, stylograph pens and other pens
P509	Pens, stylos, pen-holders, pencil-holders and similar holders	9608.40	Propelling or sliding pencils
P509	Pens, stylos, pen-holders, pencil-holders and similar holders	9608.60	Refills for ball-point pens, comprising the ball-point and ink-reservoir
P509	Pens, stylos, pen-holders, pencil-holders and similar holders	9608.91	Pen nibs and nib points
P510	Lighters	9613.10	Pocket lighters, gas fuelled, non-refillable
P510	Lighters	9613.20	Pocket lighters, gas fuelled, refillable
P510	Lighters	9613.80	Lighters (excl. gas fuelled pocket lighters, and fuses and primers for propellant powders and explosives)
P511	Other, including Brooms and brushes	9615.11	Combs, hair-slides and the like of hard rubber or plastics
P511	Other, including Brooms and brushes	9603.21	Tooth brushes, incl. dental-plate brushes
P511	Other, including Brooms and brushes	9603.90	Mops and leather dusters; prepared knots and tufts for broom or brush making; squeegees of rubber or other flexible materials; brooms and brushes, n.e.s.
P511	Other, including Brooms and brushes	9604.00	Hand sieves and hand riddles (excl. colanders)
P511	Other, including Brooms and brushes	9618.00	Tailors' dummies and other lay figures, automata and other animated displays used for shop window dressing (excl. the articles actually on display, educational models and toy dolls)
P6*	Further detailing has to be developed		to be further developed
P701	Tyre cord fabric of high tenacity yarn	5902.10	Tyre cord fabric of high-tenacity yarn of nylon or other polyamides, whether or not dipped or impregnated with rubber or plastic

P701	Tyre cord fabric of high tenacity yarn	5902.20	Tyre cord fabric of high-tenacity polyester yarn, whether or not dipped or impregnated with rubber or plastic
P701	Tyre cord fabric of high tenacity yarn	5902.90	Tyre cord fabric of high-tenacity viscose rayon yarn, whether or not dipped in rubber or plastic
P702	Textile fabrics, impregnated, coated or covered n.e.c.	5903.10	Textile fabrics impregnated, coated, covered or laminated with poly"vinyl chloride" (excl. wallcoverings of textile materials impregnated or covered with poly"vinyl chloride"; floor coverings consisting of a textile backing and a top layer or covering of poly"vinyl chloride")
P702	Textile fabrics, impregnated, coated or covered n.e.c.	5903.20	Textile fabrics impregnated, coated, covered or laminated with polyurethane (excl. wallcoverings of textile materials impregnated or covered with polyurethane; floor coverings consisting of a textile backing and a top layer or covering of polyurethane)
P702	Textile fabrics, impregnated, coated or covered n.e.c.	5903.90	Textile fabrics impregnated, coated, covered or laminated with plastics other than poly"vinyl chloride" or polyurethane (excl. tyre cord fabric of high-tenacity yarn of nylon or other polyamides, polyesters or viscose rayon; wallcoverings of textile materials impregnated or covered with plastic; floor coverings consisting of a textile backing and a top layer or covering of plastics)
P703	Apparel and clothing accessories of plastics (incl. gloves)	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)
P801	Umbrellas, sun-umbrellas, walking-sticks, seat-sticks and the like	6601.10	Garden or similar umbrellas (excl. beach tents)
P801	Umbrellas, sun-umbrellas, walking-sticks, seat-sticks and the like	6601.91	Umbrellas having a telescopic shaft (excl. toy umbrellas)
P801	Umbrellas, sun-umbrellas, walking-sticks, seat-sticks and the like	6601.99	Umbrellas and sun umbrellas, incl. walking-stick umbrellas (excl. umbrellas having a telescopic shaft, garden umbrellas and the like, and toy umbrellas)
P802	glasses	9003.11	Frames and mountings for spectacles, goggles or the like, of plastics
P802	glasses	9004.10	Sunglasses
P802	glasses	9005.10	Binoculars
P803	Syringes, with or without needles	9018.31	Syringes, with or without needles, used in medical, surgical, dental or veterinary sciences
P804	Furniture	9401.80	Seats, n.e.s.
P804	Furniture	9403.70	Furniture of plastics (excl. medical, dental, surgical or veterinary, and seats)
P805	Sporting balls and other sport equipment	9506.32	Golf balls
P805	Sporting balls and other sport equipment	9506.69	Balls (excl. inflatable, tennis balls, golf balls, and table-tennis balls)
P805	Sporting balls and other sport equipment	9506.91	Articles and equipment for general physical exercise, gymnastics or athletics

P806	Others, wigs, artificial flowers, etc	6701.00	Skins and other parts of birds with their feathers or down, feathers, parts of feathers, down and articles thereof (excl. goods of heading 0505, worked quills and scapes, footwear and headgear, articles of bedding and similar furnishing of heading 9404, toys, games and sports requisites, and collectors' pieces)
P805	Sporting balls and other sport equipment	6702.10	Artificial flowers, foliage and fruit and parts thereof, and articles made of artificial flowers, foliage or fruit, by binding, glueing, fitting into one another or similar methods, of plastics
P805	Sporting balls and other sport equipment	6702.90	Artificial flowers, foliage and fruit and parts thereof, and articles made of artificial flowers, foliage or fruit, by binding, glueing, fitting into one another or similar methods (excl. of plastics)
P805	Sporting balls and other sport equipment	6704.11	Complete wigs of synthetic textile materials
P805	Sporting balls and other sport equipment	6704.19	False beards, eyebrows and eyelashes, switches and the like, of synthetic textile materials (excl. complete wigs)
P805	Sporting balls and other sport equipment	6704.20	Wigs, false beards, eyebrows and eyelashes, switches and the like, of human hair, and articles of human hair, n.e.s.
P805	Sporting balls and other sport equipment	6704.90	Wigs, false beards, eyebrows and eyelashes, switches and the like, of animal hair or textile materials (excl. synthetic textile materials)
P805	Sporting balls and other sport equipment	9505.10	Christmas articles (excl. candles and electric lighting sets, natural Christmas trees and Christmas tree stands)
P805	Sporting balls and other sport equipment	9505.90	Festival, carnival or other entertainment articles, incl. conjuring tricks and novelty jokes, n.e.s.

Annex 2: Correspondence table between the Plastic-Keys and CPC code

CPC Code	CPC Description	Plastic Key
36490	Other articles for the conveyance or packing of goods, of plastics; stoppers, lids, caps and other closures, of plastics	P101
36410	Sacks and bags, of plastics	P102
21321	Tomato juice	P103
21329	Other vegetable juices	P103
21431	Orange juice	P103
21432	Grapefruit juice	P103
21433	Pineapple juice	P103
21434	Grape juice	P103
21435	Apple juice	P103
21439	Other fruit juices, n.e.c.	P103
17300	Steam and hot water	P104
24410	Bottled waters, not sweetened or flavoured	P104
24490	Other non-alcoholic caloric beverages	P105
49511	Rail locomotives powered from an external source of electricity	P201
49512	Diesel-electric locomotives	P201
49519	Other rail locomotives; locomotive tenders	P201
49520	Self-propelled railway or tramway coaches, vans and trucks (except maintenance or service vehicles)	P202
49531	Railway or tramway maintenance or service vehicles, whether or not self-propelled	P202
49532	Railway or tramway passenger coaches, not self-propelled; luggage vans, post office coaches and other special-purpose railway or tramway coaches, not self-propelled (except maintenance or service vehicles)	P202
49533	Railway or tramway goods vans and wagons, not self-propelled	P203
44141	Pedestrian controlled tractors	P204
44142	Track-laying tractors	P204
44149	Other agricultural tractors	P204
49111	Road tractors for semi-trailers	P204
49112	Public-transport type passenger motor vehicles	P205
49116	Motor vehicles, for the transport of persons, specially designed for travelling on snow; golf cars and similar vehicles	P205
49113	Motor cars and other motor vehicles principally designed for the transport of persons (except public-transport type vehicles, vehicles	P206

	pecially designed for travelling on snow, and golf cars and similar vehicles)	
44428	Dumpers designed for off-highway use	P207
49114	Motor vehicles n.e.c. for the transport of goods	P207
49115	Crane lorries	P208
49119	Special-purpose motor vehicles n.e.c.	P208
43530	Fork-lift trucks; other works trucks whether or not fitted with lifting or handling equipment; tractors of the type used on railway station platforms	P209
43530	Fork-lift trucks; other works trucks whether or not fitted with lifting or handling equipment; tractors of the type used on railway station platforms	P209
44710	Tanks and other armoured fighting vehicles, motorized, and parts thereof	P210
49911	Motorcycles and cycles fitted with an auxiliary motor, with reciprocating internal combustion piston engine of a cylinder capacity not exceeding 50 cc	P211
49912	Motorcycles and cycles fitted with an auxiliary motor, with reciprocating internal combustion piston engine of a cylinder capacity exceeding 50 cc	P211
49913	Motorcycles and cycles fitted with an auxiliary motor, other than those with reciprocating internal combustion piston engines; side-cars	P211
49921	Bicycles and other cycles, not motorized	P212
49922	Invalid carriages	P213
49222	Trailers and semi-trailers of the caravan type, for housing or camping	P214
49229	Other trailers and semi-trailers (including trailers and semi-trailers for the transport of goods), except self-loading or self-unloading trailers or semi-trailers for agricultural purposes	P214
49610	Balloons and dirigibles; gliders, hang gliders and other non-powered aircraft	P215
49621	Helicopters	P216
49622	Aeroplanes and other powered aircraft of an unladen weight not exceeding 2000 kg	P216
49623	Aeroplanes and other powered aircraft of an unladen weight exceeding 2000 kg	P216
49630	Spacecraft and spacecraft launch vehicles	P217
49311	Cruise ships, excursion boats and similar vessels, principally designed for the transport of persons; ferry boats of all kinds	P218
49312	Tankers (ships)	P218

49313	Refrigerator vessels (ships), except tankers	P218
49314	Other vessels for the transport of goods and other vessels for the transport of both persons and goods	P218
49315	Fishing vessels; factory ships and other vessels for processing or preserving fishery products	P218
49316	Tugs and pusher craft	P220
49410	Sailboats (except inflatable), with or without auxiliary motor	P220
49490	Other vessels for pleasure or sports; rowing boats and canoes	P220
49319	Other vessels (including light-vessels, fire-floats, dredgers, floating cranes, floating docks, warships and lifeboats other than rowing boats), except floating or submersible drilling or production platforms	P221
49320	Floating or submersible drilling or production platforms	P221
49390	Other floating structures	P222
27220	Carpets and other textile floor coverings, woven, not tufted or flocked	P301
27230	Carpets and other textile floor coverings, tufted	P302
27290	Other carpets and textile floor coverings (including those of felt)	P303
27912	Tulles and other net fabrics, except woven, knitted or crocheted fabrics; lace in the piece, in strips or in motifs	P304
27913	Embroidery in the piece, in strips or in motifs	P304
36320	Tubes, pipes and hoses, and fittings therefor, of plastics	P305
36910	Floor coverings of plastics, in rolls or in the form of tiles; wall or ceiling coverings of plastics	P306
36920	Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics	P307
36330	Plates, sheets, film, foil and strip, of plastics, not self-adhesive, non-cellular and not reinforced, laminated, supported or similarly combined with other materials	P308
36390	Other plates, sheets, film, foil and strip, of plastics	P309
36930	Baths, wash-basins, lavatory pans and covers, flushing cisterns and similar sanitary ware, of plastics	P310
36950	Builders' ware of plastics n.e.c.	P311
36940	Tableware, kitchenware, other household articles and toilet articles, of plastics	P502
36990	Articles of plastics n.e.c.	P503
42921	Hand tools (including hand tools of a kind used in agriculture, horticulture or forestry, hand saws, files, pliers and metal cutting shears, hand-operated spanners, blow-lamps and clamps)	P504
38111	Seats, primarily with metal frames	P506
38112	Seats, primarily with wooden frames	P506

46531	Portable electric lamps designed to function by their own source of energy (except those for cycles or motor vehicles); electric ceiling or wall lighting fittings (except those for lighting public open spaces or thorough-fares); electric table, desk, bedside or floor-standing lamps; non-electrical lamps and lighting fittings; illuminated signs, illuminated name-plates and the like	P507
29220	Luggage, handbags and the like, of leather, composition leather, plastic sheeting, textile materials, vulcanized fibre or paperboard; travel sets for personal toilet, sewing or shoe or clothes cleaning	P508
38911	Pens, duplicating stylos, pencils, pen-holders, pencil-holders and similar holders, and parts thereof; crayons, pencil leads, pastels, drawing charcoals and chalks	P509
38994	Cigarette lighters and other lighters; smoking pipes and cigar or cigarette holders, and parts thereof; combs, hair-slides and the like; hairpins, curling pins, curling grips, hair-curlers and the like (except electro-thermic apparatus), and parts thereof; scent sprays and similar toilet sprays, and mounts and heads therefor; powder-puffs and pads for the application of cosmetics or toilet preparations	P510
38993	Brooms, brushes, hand-operated mechanical floor sweepers (not motorized), mops and feather dusters; prepared knots and tufts for broom or brush making; paint pads and rollers; squeegees (other than roller squeegees)	P511
38999	Articles n.e.c. (including candles, tapers, skins of birds with their feathers, artificial flowers, entertainment articles, hand sieves, hand riddles, vacuum flasks, tailors dummies, animated displays used for shop window dressing, and parts n.e.c.)	P511
27996	Tyre cord fabric of high tenacity yarn of nylon or other polyamides, polyesters or viscose rayon	P701
27997	Textile fabrics, impregnated, coated or covered n.e.c.	P702
28243	Apparel and clothing accessories of plastics (incl. gloves)	P703
38921	Umbrellas, sun-umbrellas, walking-sticks, seat-sticks, whips, riding-crops and the like	P801
48312	Spectacles, goggles and the like, corrective, protective or other	P802
48313	Frames and mountings for spectacles, goggles or the like	P802
48314	Binoculars, monoculars and other optical telescopes; other astronomical instruments, except instruments for radio-astronomy; compound optical microscopes	P802
48150	Other instruments and appliances used in medical, surgical or veterinary sciences (including syringes, needles, catheters, cannulae, ophthalmic instruments and appliances n.e.c. and electro-medical apparatus n.e.c.)	P803
38119	Other seats	P804

38140	Other furniture n.e.c.	P804
38430	Gymnasium or athletics articles and equipment	P805
38440	Other articles and equipment for sports or outdoor games	P805
38972	Human hair, dressed, thinned, bleached or otherwise worked; wool or other animal hair or other textile materials, prepared for use in making wigs or the like; wigs, false beards, eyebrows and eyelashes, switches and the like, of human or animal hair or of textile materials; articles of human hair n.e.c.	P806
38991	Festive, carnival or other entertainment articles, including conjuring tricks and novelty jokes	P806

Annex 3: Polymer composition of different sectors

No.	Market sector description	PE	PP	PS	PVC	PET	PUR
1	Packaging	51%	18%	5%	2%	23%	0%
2	Transportation	13%	38%	0%	4%	0%	24%
3	Building and Construction	51%	18%	5%	2%	23%	0%
4	Electrical/ Electronic	23%	6%	12%	43%	0%	13%
5	Consumer & Institutional Products	18%	23%	15%	10%	0%	10%
6	Industrial Machinery	38%	32%	15%	5%	0%	8%
8	Other	38%	25%	0%	0%	0%	38%