



**World Customs
Organization**

The HS 2022 update

Proposed interim approach

HARMONISED SYSTEM CODES FOR HYDROFLUOROCARBONS

MOP 32 Virtual Side Event

24 November 2020

The Harmonized System and its amendments



- The Harmonized Commodity Description and Coding System generally referred to as "Harmonized System" or simply "HS" is a multipurpose international goods nomenclature developed by the World Customs Organization (WCO)
- It is the basis for applying Customs tariffs, controlling trade and the collection of international trade statistics

<http://www.wcoomd.org/en/topics/nomenclature/overview.aspx>

- Each substance is identified by a six-digit code (subheading) arranged in a legal and logical structure
- Thanks to the continuous cooperation between the WCO and UNEP-OzonAction Secretariats, the changes occurred during the amendments to the Montreal Protocol (e.g.: London, Copenhagen, Beijing and Kigali) have been reflected in the HS amendments of 2007, 2012, 2017 and now 2022.

Substances controlled under the Montreal Protocol



Current 2017 HS codes

29.03

Halogenated derivatives of hydrocarbons.

- Saturated chlorinated derivatives of acyclic hydrocarbons :

- 2903.11 -- Chloromethane (methyl chloride) and chloroethane (ethyl chloride)
- 2903.12 -- Dichloromethane (methylene chloride)
- 2903.13 -- Chloroform (trichloromethane)
- 2903.14 -- Carbon tetrachloride
- 2903.15 -- Ethylene dichloride (ISO) (1,2-dichloroethane)
- 2903.19 -- Other

Methyl chloroform

Current 2017 HS codes



Heading	H.S. Code	Description	Category
		- Unsaturated chlorinated derivatives of acyclic hydrocarbons :	
	2903.21	-- Vinyl chloride (chloroethylene)	
	2903.22	-- Trichloroethylene	
	2903.23	-- Tetrachloroethylene (perchloroethylene)	
	2903.29	-- Other	
		- Fluorinated, brominated or iodinated derivatives of acyclic hydrocarbons :	
	2903.31	-- Ethylene dibromide (ISO) (1,2-dibromoethane)	HFCs
	2903.39	-- Other	Methyl bromide
		- Halogenated derivatives of acyclic hydrocarbons containing two or more different halogens :	
	2903.71	-- Chlorodifluoromethane	HCFCs
	2903.72	-- Dichlorotrifluoroethanes	
	2903.73	-- Dichlorofluoroethanes	
	2903.74	-- Chlorodifluoroethanes	
	2903.75	-- Dichloropentafluoropropanes	
	2903.76	-- Bromochlorodifluoromethane, bromotrifluoromethane and dibromotetrafluoroethanes	Halons
	2903.77	-- Other, perhalogenated only with fluorine and chlorine	CFCs
	2903.78	-- Other perhalogenated derivatives	
	2903.79	-- Other	Bromodifluoromethane (HBFCs) Bromochloromethane

Current 2017 HS codes

- Specific codes for certain most traded HCFCs (codes **2903.71 to 2903.75**)
- All HFCs are covered by a single HS code **2903.39**
- Mixtures or blends are classified in heading 38.24 only if they are not elsewhere specified or included. For example, some mixtures of organic solvents containing HCFCs are classified in heading 38.14
 - Mixtures/blends containing HCFCs covered in subheading **3824.74**
 - Mixtures/blends containing HFCs covered in subheading **3824.78**

KIGALI Amendment - HFCs



- Parties to the Montreal Protocol agreed in October 2016 in Kigali, Rwanda to include the phase-down of HFCs under the Protocol.
- Parties were required to implement an import and export licensing system for HFCs by 1/1/ 2019 (or 2 years later if required).
- WHY HS CODES ARE SO IMPORTANT?

To establish a the licensing system, to monitor trade and to collect information, governments need to assign specific HS codes to individual HFCs.

The HS 2022 amendment which will be implemented 1/1/2022 contains specific subheadings for the most commonly traded HFCs (mandatory for all Parties)



KIGALI Amendment – HFCs

Interim measures



- What to do until 1/1/2022?
- Until 1/1/2022 Parties need to take URGENT action to open national subheadings to be able to properly establish a licensing system, monitor and report trade in HFCs
- HOW?

To help governments to open national subheadings, the WCO has issued a RECOMENDATION to insert in national Nomenclatures, national subheadings for HFCs controlled by virtue of the Kigali amendment to the Montreal Protocol.

**RECOMMENDATION OF THE CUSTOMS CO-OPERATION COUNCIL* ON THE
INSERTION IN NATIONAL STATISTICAL NOMENCLATURES
OF SUBHEADINGS TO FACILITATE THE COLLECTION AND COMPARISON
OF DATA ON THE INTERNATIONAL MOVEMENT OF SUBSTANCES CONTROLLED
BY VIRTUE OF THE KIGALI AMENDMENTS TO THE MONTREAL PROTOCOL ON
SUBSTANCES THAT DEplete THE OZONE LAYER**
(27 JUNE 2019)



http://www.wcoomd.org/-/media/wco/public/global/pdf/about-us/legal-instruments/recommendations/hs/recommendation_kigali.pdf?la=en

THE CUSTOMS CO-OPERATION COUNCIL,

CONSIDERING the continuing need to monitor the international trade in substances that deplete the ozone layer,

NOTING the request by the United Nations Environment Programme for the collection and comparison of data on the international movement of additional substances controlled by virtue of the amendment to the Montreal Protocol adopted in October 2016 (Kigali),

TAKING INTO ACCOUNT an urgent and increasing need for Customs to assist in the implementation of the amendment to the Montreal Protocol after it will enter into force on 1 January 2019,

RECOGNIZING that amendments to the Harmonized System Convention cannot be implemented for several years,

HAVING REGARD to the Recommendation of 20 June 1995 (amended 24 June 2011) and the Recommendation of 1 July 2006 (amended 24 June 2011),

RECOMMENDS that Member Administrations and Contracting Parties to the Harmonized System Convention take all appropriate action to insert the following additional subdivisions in their statistical nomenclatures as soon as possible:

Subheading 2903.39

- Saturated fluorinated derivatives of acyclic hydrocarbons:
- Trifluoromethane (HFC-23)
- Difluoromethane (HFC-32)
- Fluoromethane (HFC-41), 1,2-difluoroethane (HFC-152) and 1,1-difluoroethane (HFC-152a)
- Pentafluoroethane (HFC-125), 1,1,1-trifluoroethane (HFC-143a) and 1,1,2-trifluoroethane (HFC-143)
- 1,1,1,2-Tetrafluoroethane (HFC-134a) and 1,1,2,2-tetrafluoroethane (HFC-134)

WCO Recommendation

Interim measures



ASHRAE #	CHEMICAL NAME	HS 2017
HFC-23	Trifluoromethane	2903.39
HFC-32	Difluoromethane	2903.39
HFC-41	Fluoromethane	2903.39
HFC-152	1,2-difluoroethane	2903.39
HFC-152a	1,1-difluoroethane	2903.39
HFC-125	Pentafluoroethane	2903.39
HFC-143a	1,1,1-trifluoroethane	2903.39
HFC-143	1,1,2- trifluoroethane	2903.39
HFC-134a	1,1,1,2-tetrafluoroethane	2903.39
HFC-134	1,1,2,2-tetrafluoroethane	2903.39
HFC-227ea	1,1,1,2,3,3,3-heptafluoropropane	2903.39
HFC-236cb	1,1,1,2,2,3-hexafluoropropane	2903.39
HFC-236ea	1,1,1,2,3,3-hexafluoropropane	2903.39
HFC-236fa	1,1,1,3,3,3- hexafluoropropane	2903.39
HFC-245Sfa	1,1,1,3,3-pentafluoropropane	2903.39
HFC-245ca	1,1,2,2,3-pentafluoropropane	2903.39
HFC-365mfc	1,1,1,3,3-pentafluorobutane	2903.39
HFC-43-10mee	1,1,1,2,2,3,4,5,5,5- decafluoropentane	2903.39
	OTHER HFCs	2903.39

Open national subheadings for specific HFCs and their mixtures
Some substances may share the same code

2022 Amendment - New HS Codes for HFCs



- Saturated fluorinated derivatives of acyclic hydrocarbons :

2903.41	-- Trifluoromethane (HFC-23)
2903.42	-- Difluoromethane (HFC-32)
2903.43	-- Fluoromethane (HFC-41), 1,2-difluoroethane (HFC-152) and 1,1-difluoroethane (HFC-152a)
2903.44	-- Pentafluoroethane (HFC-125), 1,1,1-trifluoroethane (HFC-143a) and 1,1,2-trifluoroethane (HFC-143)
2903.45	-- 1,1,1,2-Tetrafluoroethane (HFC-134a) and 1,1,2,2-tetrafluoroethane (HFC-134)
2903.46	-- 1,1,1,2,3,3,3-Heptafluoropropane (HFC-227ea), 1,1,1,2,2,3-hexafluoropropane (HFC-236cb), 1,1,1,2,3,3-hexafluoropropane (HFC-236ea) and 1,1,1,3,3,3-hexafluoropropane (HFC-236fa)
2903.47	-- 1,1,1,3,3-Pentafluoropropane (HFC-245fa) and 1,1,2,2,3-pentafluoropropane (HFC-245ca)
2903.48	-- 1,1,1,3,3-Pentafluorobutane (HFC-365mfc) and 1,1,1,2,2,3,4,5,5,5-decafluoropentane (HFC-43-10mee)
2903.49	-- Other

HFCs

Note that ASHRAE designations have been included for HS 2022 as an aid in the identification of refrigerants in accordance with standard commercial practice

- Unsaturated fluorinated derivatives of acyclic hydrocarbons :

2903.51	-- 2,3,3,3-Tetrafluoropropene (HFO-1234yf), 1,3,3,3-tetrafluoropropene (HFO-1234ze) and (Z)-1,1,1,4,4,4-hexafluoro-2-butene (HFO-1336mzz)
2903.59	-- Other

HFOs

It is always possible to assign specific national HS codes for individual HFCs at national level using 8 or more digits

2022 Amendment - New HS Codes for Blends



New heading 38.27 was created to include mixtures containing HFCs

	-Containing trifluoromethane (HFC-23) or perfluorocarbons (PFCs) but not containing chlorofluorocarbons (CFCs) or hydrochlorofluorocarbons (HCFCs) :
3827.51	-- Containing trifluoromethane (HFC-23)
3827.59	-- Other
	-Containing other hydrofluorocarbons (HFCs) but not containing chlorofluorocarbons (CFCs) or hydrochlorofluorocarbons (HCFCs) :
3827.61	-- Containing 15 % or more by mass of 1,1,1-trifluoroethane (HFC-143a)
3827.62	-- Other, not included in the subheading above, containing 55 % or more by mass of pentafluoroethane (HFC- 125) but not containing unsaturated fluorinated derivatives of acyclic hydrocarbons (HFOs)
3827.63	-- Other, not included in the subheadings above, containing 40 % or more by mass of pentafluoroethane (HFC-125)
3827.64	-- Other, not included in the subheadings above, containing 30 % or more by mass of 1,1,1,2-tetrafluoroethane (HFC-134a) but not containing unsaturated fluorinated derivatives of acyclic hydrocarbons (HFOs)
3827.65	-- Other, not included in the subheadings above, containing 20 % or more by mass of difluoromethane (HFC-32) and 20 % or more by mass of pentafluoroethane (HFC-125)
3827.68	-- Other, not included in the subheadings above, containing substances of subheadings 2903.41 to 2903.48
3827.69	-- Other

HS 2022 - Summary of new HS Codes for HFCs



HFCs			
ASHRAE #	CHEMICAL NAME	HS 2017	HS 2022
HFC-23	Trifluoromethane	2903.39	2903.41
HFC-32	Difluoromethane	2903.39	2903.42
HFC-41	Fluoromethane	2903.39	2903.43
HFC-152	1,2-difluoroethane	2903.39	2903.43
HFC-152a	1,1-difluoroethane	2903.39	2903.43
HFC-125	Pentafluoroethane	2903.39	2903.44
HFC-143a	1,1,1-trifluoroethane	2903.39	2903.44
HFC-143	1,1,2- trifluoroethane	2903.39	2903.44
HFC-134a	1,1,1,2-tetrafluoroethane	2903.39	2903.45
HFC-134	1,1,2,2-tetrafluoroethane	2903.39	2903.45
HFC-227ea	1,1,1,2,3,3,3-heptafluoropropane	2903.39	2903.46
HFC-236cb	1,1,1,2,2,3-hexafluoropropane	2903.39	2903.46
HFC-236ea	1,1,1,2,3,3-hexafluoropropane	2903.39	2903.46
HFC-236fa	1,1,1,3,3,3- hexafluoropropane	2903.39	2903.46
HFC-245Sfa	1,1,1,3,3-pentafluoropropane	2903.39	2903.47
HFC-245ca	1,1,2,2,3-pentafluoropropane	2903.39	2903.47
HFC-365mfc	1,1,1,3,3-pentafluorobutane	2903.39	2903.48
HFC-43-10mee	1,1,1,2,2,3,4,5,5,5- decafluoropentane	2903.39	2903.48
	OTHER HFCs	2903.39	2903.49

HS 2022	MIXTURES	EXAMPLES (commonly traded in bold)		
Containing trifluoromethane (HFC-23) or perfluorocarbons (PFCs) but not containing chlorofluorocarbons (CFCs) or hydrochlorofluorocarbons (HCFCs)				
3827.51	Containing trifluoromethane (HFC-23)	R-508A	R-508B	
3827.59	Other (i.e. containing PFCs but no (HFC-23),CFCs or HCFCs)	R-413A		
Containing other hydrofluorocarbons (HFCs) but not containing chlorofluorocarbons (CFCs) or hydrochlorofluorocarbons (HCFCs)				
3827.61	Containing 15 % or more by mass of 1,1,1-trifluoroethane (HFC-143a)	R-404A R-507A	R-428A	R-434A
3827.62	Other, not included in the subheading above, containing 55 % or more by mass of pentafluoroethane (HFC- 125) but not containing unsaturated fluorinated derivatives of acyclic hydrocarbons (HFOs)	R-407B R-410B R-417B R-419A	R-421A R-421B R-422A R-422B	R-422C R-422D R-422E
3827.63	Other, not included in the subheadings above, containing 40 % or more by mass of pentafluoroethane (HFC-125)	R-407A R-410A R-417A R-419B	R-424A R-438A R-439A R-452A	R-452C R-460A
3827.64	Other, not included in the subheadings above, containing 30 % or more by mass of 1,1,1,2-tetrafluoroethane (HFC-134a) but not containing unsaturated fluorinated derivatives of acyclic hydrocarbons (HFOs)	R-407C R-407D R-407E R-407F R-407G	R-407H R-417C R-423A R-425A R-426A	R-427A R-437A R-442A R-453A R-458A
3827.65	Other, not included in the subheadings above, containing 20 % or more by mass of difluoromethane (HFC-32) and 20 % or more by mass of pentafluoroethane (HFC-125)	R-448A R-449A R-449B	R-449C R-460B	
3827.68	Other, not included in the subheadings above, containing substances of subheadings 2903.41 to 2903.48 (i.e. containing HFC-23, HFC-32, HFC-41, HFC-152, HFC-152a, HFC-125, HFC-143a, HFC-143, HFC-134a and HFC-134, HFC-227ea, HFC-236cb, HFC-236ea, HFC-236fa, HFC-245fa, HFC-245ca, HFC-365mfc and/or HFC-43-10mee)	R-429A R-430A R-431A R-435A R-440A R-444A R-444B R-445A R-446A	R-447A R-447B R-450A R-451A R-451B R-452B R-454A R-454B R-454C	R-455A R-456A R-457A R-459A R-459B R-512A R-513A R-513B R-515A
3827.69	Other (i.e. containing other HFCs not listed in subheadings 3827.61 to 3827.68– can also contain HFOs)	R-514A		



**World Customs
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**Thank you
for your attention**

Daniel Cardozo

Technical Officer
Tariff and Trade Affairs

