



## Customs and enforcement officers Information Note

### Monitoring trade in HCFCs

#### Introduction

The customs officers training programmes dealing with ozone depleting substances (ODS) controlled under the Montreal Protocol which have been conducted in developing countries to date were focused principally on monitoring and the control of trade in chlorofluorocarbons (CFCs). Considering that CFCs have already been



phased-out (except for some exempted uses) customs officers now need to be more aware of shipments of other ODS, including hydrochlorofluorocarbons (HCFCs) and Methyl Bromide. The information provided at training courses which cover ozone layer depletion, Montreal Protocol provisions, ODS identification and illegal trade in ODS will therefore be updated and revised. This new information concerns: new observations demonstrating the links between ozone layer depletion and climate change; the new approach taken by the Parties to the Montreal Protocol with regard to HCFC phase-out schedules; the forthcoming phase-out date for Methyl Bromide; new possibilities for ODS identification; and new methods of ODS smuggling.

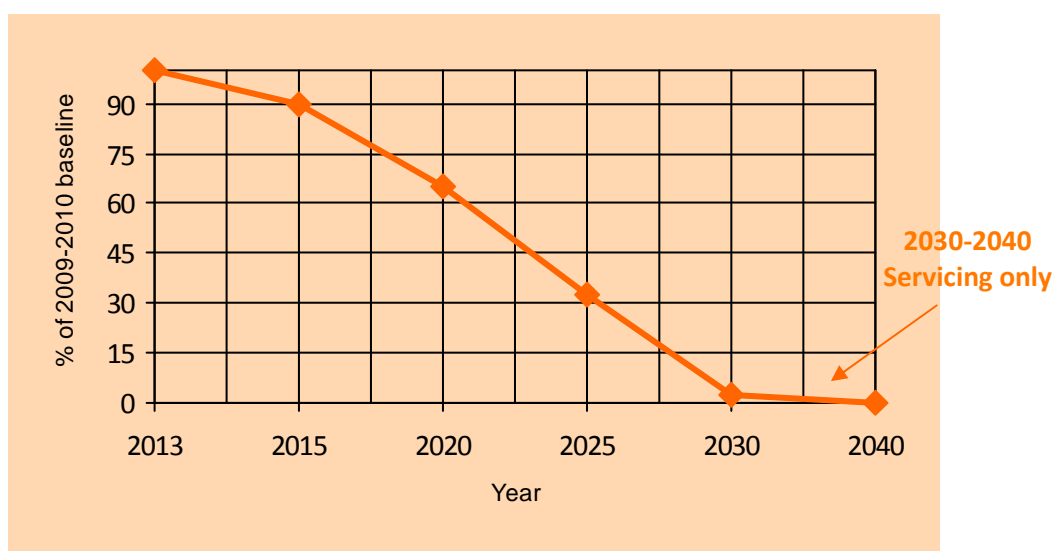
In order to allow customs officers to be better prepared for the new challenges resulting from the rapid increase in volume of HCFCs traded globally and the need for monitoring and control of that trade in view of the Montreal Protocol provisions, UNEP DTIE is revising the Customs Training Manual (CTM) and supporting documentation (Customs Quick Tool, Customs ODS Poster) to be used in the forthcoming customs training courses, which will commonly be held in the framework of HCFC Phase out Management Plans (HPMPs). This brief guidance document has been prepared in advance to the revised CTM.

#### HCFCs and the Montreal Protocol

HCFCs are among the ODS controlled under the Montreal Protocol, an important international environmental treaty signed by all countries in the world. The list of the most commonly traded HCFCs covered by the Montreal Protocol provisions can be found in Annex 1.

HCFCs which are components of mixtures (or 'blends') are also covered by the Montreal Protocol provisions. A list of the most commonly traded refrigeration mixtures containing HCFCs can be found in Annex 2.

Although HCFCs have relatively low ozone depletion potentials (ODPs),<sup>1</sup> they present a real threat to the ozone layer because of the huge quantities which are used worldwide and may be emitted to the atmosphere. Apart from a negative effect on ozone layer, HCFCs are also potent greenhouse gases which can have very high global



*Figure 1. HCFC phase out schedule for developing countries agreed under the Montreal Protocol*

warming potentials (GWPs). All Parties to the Montreal Protocol are obliged to follow the HCFC consumption phase-out schedules,<sup>2</sup> which are different for developed and developing countries. Figure 1 (above) shows the developing country phase-out schedule.

Certain countries have established more ambitious HCFC phase out schedules in their domestic legislation. Moreover, each Party to the Montreal Protocol is obliged to establish a licensing system for imports and exports of HCFCs and report to the Ozone Secretariat quantities of HCFCs produced, exported and imported.

HCFCs which are contained in products or equipment (i.e. not in containers used for transportation or storage) are not controlled under the Montreal Protocol, but nevertheless many countries have independently introduced controls on products or equipment containing ODS. Customs officers are encouraged to verify whether their country's legislation has any trade restrictions concerning products and equipment containing or relying on HCFCs or any other ODS. The list of products and equipment which may contain HCFCs or rely on HCFCs is found in Annex 3.<sup>3</sup>

### Global trade in HCFCs

Presently, the global trade in HCFCs in bulk amounts to around 1 million tonnes per year (including HCFCs contained in mixtures). HCFCs are used mostly as refrigerants in air conditioning, refrigeration and heat pump equipment and as foam blowing agents, but other uses such as aerosol propellants, fire-extinguishing agents, solvents or sterilants are also common. Large quantities of HCFCs are also used in chemical processes as feedstock and process agents;<sup>4</sup> however, HCFCs traded for these uses are not included in a country's consumption. Furthermore, used or non-virgin HCFCs (recovered, recycled or reclaimed) are not counted in the consumption calculations, but according to Article 4B of the Montreal Protocol imports and exports of all traded HCFCs, including those contained in mixtures as well as those intended for exempted uses, need to be licensed.

HCFCs were introduced as a replacement in the same applications where chlorofluorocarbons (CFCs) were previously used. CFCs have now been phased out under the Montreal Protocol except for certain essential uses approved by the Montreal Protocol such as laboratory and analytical, process agent and feedstock uses. Although international trade in non-virgin CFCs is still legal as stated in the Montreal Protocol provisions, many countries have banned it in their

domestic legislation. Customs officers must check whether their country's domestic legislation still allows international trade in non-virgin CFCs as well as in CFCs intended for exempted uses.

### HCFCs and Customs Officers

So far customs officers in developing countries and countries with economies in transition have been advised by local environmental authorities to pay special attention to controlling shipments of CFCs, while trade in HCFCs was not considered a priority. Presently however, National Ozone Units (NOUs) have to monitor closely the quantities of HCFCs actually imported and exported in order to avoid exceeding the consumption limits set up in their HCFC Phase out Management Plans (HPMPs) in which the first control measures come into place in 2013 and which take into account the Montreal Protocol provisions and specific national obligations. It is therefore very important that from now on, national Customs authorities include consideration of HCFCs when setting up their priorities in checking shipments of substances which are considered environmentally sensitive.

The majority of HCFCs and HCFC-containing mixtures are gases at room temperature, so they are shipped in pressurized gas cylinders of various capacities – standard containers are :

- 12-15 kg (most commonly 13.6 kg) disposable cylinders, usually coloured light green for HCFC-22 (the most



(a)



(b)



(c)

Figure 2. Examples of 13.6 kg disposable cylinders:  
(a) HCFC-22 – the most popular HCFC refrigerant  
(b) SUVA MP39 (R-401, a mixture containing HCFCs)  
(c) Forane 408 (R-408, a mixture containing HCFCs)



(a)



(b)

Figure 3. Examples of non-disposable cylinders: (a) 50 kg capacity, (b) 1000 kg capacity



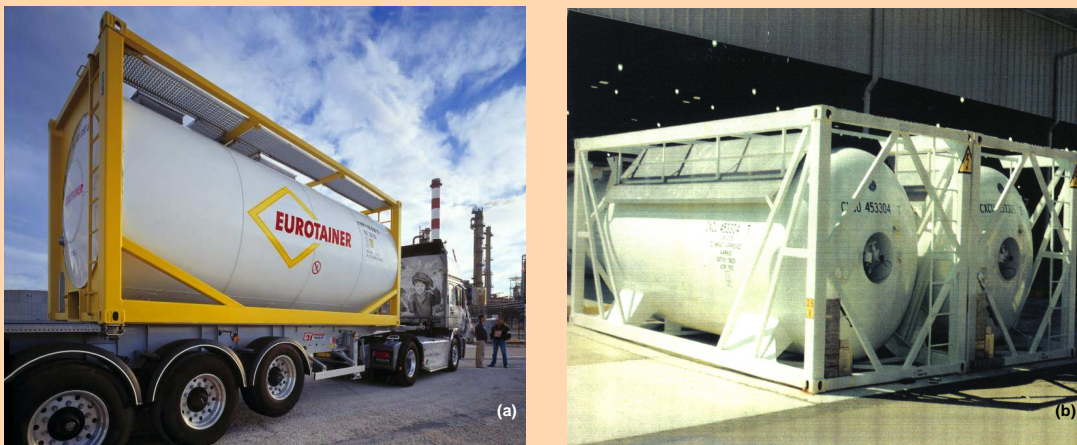


Figure 4. Examples of ISO tanks:  
 (a) ISO tank transported by the truck  
 (b) ISO tanks in a storage room.

commonly used HCFC) and orange or red for refrigerant mixtures containing HCFCs. These are often packaged in cardboard boxes (Fig. 2a, 2b and 2c)

- 35 – 1000 kg non-disposable (re-usable/multiple use) cylinders (Fig. 3a and 3b)
- 30 tonne ISO tanks (Fig. 4a and 4b)

These gases are predominantly used as refrigerants in the refrigeration and air conditioning sector, so the name “Refrigerant” often appears on the cylinders containing HCFCs.

Certain HCFCs (e.g. HCFC-14b – commonly used as a foam blowing agent or solvent or HCFC-225 used as solvent) are packaged in drums of various capacities (Fig. 5a) or in truck or rail cisterns (Fig. 5b).

Each container should be correctly labelled, usually indicating the chemical and trade name and UN or CAS number of the substance it contains as well as the name and address of the producer.



Figure 5. (a) Drums holding 240 kg of HCFC-141b intended for use as foam blowing agent  
 (b) Truck cistern used for transportation of large bulk quantities of HCFC-141b

Non-disposable containers and ISO tanks should be marked with a specific container number which helps in identification of the origin and tracking of the container.

Since pressurised gases or solvents other than HCFCs (particularly hydrofluorocarbons – HFCs and mixtures containing these substances) are transported in similar containers, and may not be subject to the same controls, it is recommended that these are also checked in routine shipment controls. This may assist in identifying mislabelled HCFCs declared as a different commodity (e.g. as an HFC) to avoid customs controls.

Identification of gases contained in pressurized cylinders may be easily done by customs officers using appropriate refrigerant identifiers (sometimes called ‘gas analysers’). Identification of liquids is more difficult and requires taking samples and testing by a specialised laboratory.

### HS codes of HCFCs and HCFC-containing mixtures

On 26 June 2009, the Council of the World Customs Organization recommended to the Contracting Parties to the HS Convention to amend heading 29.03 of Chapter 29 with the objective of assigning specific 6-digit HS codes to the five most commonly used HCFCs, and at the same time regrouped CFCs and certain other ODS in a new single subheading

Based on this WCO Council Recommendation the relevant amendment of the HS was agreed upon by the HS Contracting Parties and entered into force on 1 January 2012. As of this date, HCFCs and certain other ODS are classified in the HS as follows:

#### Chapter 29. Organic chemicals.

##### 29.03 Halogenated derivatives of hydrocarbons.

[...]

2903.7 - Halogenated derivatives of acyclic hydrocarbons containing two or more different halogens :

2903.71 - - Chlorodifluoromethane (= *HCFC-22*)

2903.72 - - Dichlorotrifluoroethanes (= *HCFC-123*, covers two isomers)

2903.73 - - Dichlorofluoroethanes (= *HCFC-141*, covers 3 isomers including the most popular *HCFC-141b*)

2903.74 - - Chlorodifluoroethanes (= *HCFC-142*, covers 3 isomers, including the most popular *HCFC-142b*)

2903.75 - - Dichloropentafluoropropanes (= *HCFC-225*, covers 9 isomers, including the most popular *HCFC-225ca* and *HCFC-225cb*)

2903.76 - - Bromochlorodifluoromethane, bromotrifluoromethane and dibromotetrafluoroethanes

[...]

[...]

2903.79 - - Other (= *all remaining HCFCs and a number of other halogenated derivatives of acyclic hydrocarbons containing two or more different halogens, including inter alia the following ozone depleting substances controlled by the Montreal Protocol: hydrobromofluorocarbons (HBFCs) and bromochloromethane (BCM)*)

[...]

Detailed information on the changes in HS classification of all ozone depleting substances starting from 1 January 2012 can be found in the “*Customs and enforcement officers quick guide Changes in the 2012 HS Nomenclature for HCFCs and certain other Ozone Depleting Substances*” published by UNEP DTIE in cooperation with the WCO and distributed to Customs in all developing countries. This is available on the UNEP DTIE OzonAction website.<sup>5</sup> See also

Annex 4 for the relevant part of the text of the Recommendation of the Customs Co-operation Council concerning these amendments relating to HCFCs, CFCs and other ozone depleting substances (halons, HBFCs and BCM) .

Codes of HCFC-containing mixtures have not changed and remain as follows:

3824.71 – if the mixture contains HCFCs, but also contains CFCs

3824.74 – if the mixture contains HCFCs, but does not contain CFCs

It is also very important to note that the codes presented above apply only if the HCFC containing mixture is not covered by a more specific heading of the HS. For example, ‘preparations for fire-extinguishers’ are classified in heading 38.13 and ‘organic composite solvents’ consisting of mixtures containing HCFCs are classified in heading 38.14.

### HS codes of commonly used alternatives to HCFCs and HCFC-containing refrigeration mixtures

The commonly used alternatives to HCFCs are hydrofluorocarbons (HFCs), hydrocarbons (HCs) and, specifically in refrigeration, ammonia or CO<sub>2</sub>. Recently, a new class of HCFC alternatives - unsaturated HFCs (also called HFOs – hydrofluoroolefins) have been developed and trade in these compounds is increasing. Substitutes for HCFC-containing mixtures include HFC mixtures or HFC/HC mixtures. HS codes of the most commonly used substitutes for HCFC and HCFC-containing mixtures are presented in Annex 5.

### Illegal trade in HCFCs

Since HCFCs are presently controlled globally and import restrictions, including import quotas have been set up by a number of countries, some unscrupulous traders may wish to circumvent the legislation and smuggle HCFCs. The methods used for smuggling HCFCs do not vary much from methods used for smuggling CFCs in the past. These include:

- Mislabelling or/and mis-declaration as HFCs or other non-controlled substances
- Mislabelling or/and mis-declaration as used (recycled, reclaimed) substances
- Concealment and double layering
- Diverting from transshipment points
- Under-invoicing
- Transit through free trade zones
- Declaration as ‘products’ or ‘equipment’



A recent case of illegal trade in HCFCs is provided in Annex 6. Detailed description of other cases of illegal trade in HCFCs, smuggling methods and elements of relevant risk analysis can be found in the recently published UNEP booklet “*Risk assessment of illegal trade in HCFCs*” This is available on the UNEP DTIE OzonAction website.<sup>6</sup>

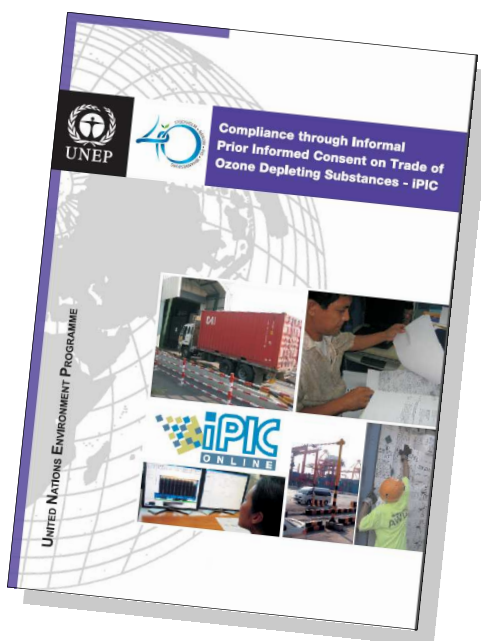
### Informal Prior Informed Consent Procedure (iPIC)

A useful initiative to assist in preventing illegal trade, which a number of countries have adopted, is to participate in the Informal Prior Informed Consent (iPIC) procedure on import and export of ODS, including HCFCs. In practice, applying the iPIC procedure means that



before issuing an export licence, the exporting country's authorities request their counterparts in the importing country to confirm that they do not object to the intended export and that an import licence will be issued for that particular shipment. The countries participating in the iPIC system created through UNEP regional networks are requested to make available the lists of eligible importers and exporters and to exchange information on cases of illegal trade in ODS, including HCFCs. The list of countries which currently apply iPIC procedures in ODS trade is found in Annex 7.

More information on iPIC procedures can be found in the brochure "*Compliance through Informal Prior Informed Consent on Trade of Ozone Depleting Substances - iPIC*". This is available on the UNEP DTIE OzonAction website.<sup>7</sup>



## Notes and references

1. ODP is a figure representing the potential effect of ODS on depletion of Earth's stratospheric ozone layer. ODP of the most widely used HCFCs varies from 0.02 to 0.11 while ODP of CFCs is close to 1.0.
2. According to the Montreal Protocol consumption is defined as production + imports – exports. Consumption is calculated in ODP tonnes. Number of ODP tonnes for a particular substance equals to number of metric tonne multiplied by ODP of the substance.
3. The list in Appendix 3 is not exhaustive and has been compiled based on the draft list of CN codes for ODS and products and equipment that may contain or rely on ODS prepared by the European Commission.
4. *Feedstock* - A controlled substance that undergoes transformation in a process in which it is converted from its original composition except for insignificant trace emission.  
*Process agent* - A controlled substance that because of its unique chemical or physical properties facilitate an intended chemical reaction and/or inhibit an unintended chemical reaction.
5. <http://www.unep.fr/ozonaction/information/mmcfiles/7532-e-2012-HS-Codes-for-ODS.pdf>
6. [http://www.unep.fr/ozonaction/information/mmcfiles/7507-e-risk\\_assessment.pdf](http://www.unep.fr/ozonaction/information/mmcfiles/7507-e-risk_assessment.pdf)
7. [http://www.unep.org/ozonaction/ecanetwork/Portals/138/IPIC2011\\_MOP23.pdf](http://www.unep.org/ozonaction/ecanetwork/Portals/138/IPIC2011_MOP23.pdf)



Annex 1 List of the most commonly traded HCFCs

Chemical name	Chemical formula	ASHRAE designation	ODP <sup>1</sup>	GWP (100y) <sup>2</sup>	CAS number	UN number	Previous HS code (until 31 Dec 2011)	New HS code (since 1 Jan 2012)	Type of containers
Dichlorofluoromethane	CHCl <sub>2</sub>	HCFC-21	0.04	151	75-43-4	1029	2903.49	2903.79 <sup>3</sup>	Pressurized cylinders, ISO tanks
Chlorodifluoromethane	CHF <sub>2</sub> Cl	HCFC-22	0.055	1810	75-45-6	1018	2903.49	2903.71	Pressurized cylinders, ISO tanks
Dichlorotrifluoroethane	C <sub>2</sub> HF <sub>3</sub> Cl <sub>2</sub>	HCFC-123	0.02	77	306-83-2	1078	2903.49	2903.72	Drums, sometimes also pressurized cylinders or ISO tanks
Chlorotetrafluoroethane	C <sub>2</sub> HF <sub>4</sub> Cl	HCFC-124	0.022	609	2837-89-0	1021	2903.49	2903.79 <sup>3</sup>	Pressurized cylinders, ISO tanks
Dichlorofluoroethane	C <sub>2</sub> H <sub>3</sub> FCl <sub>2</sub>	HCFC-141b	0.11	725	1717-00-6	9274	2903.49	2903.73	Drums, truck or rail cisterns
Chlorodifluoroethane	C <sub>2</sub> H <sub>3</sub> F <sub>2</sub> Cl	HCFC-142b	0.065	2310	75-68-3	2517	2903.49	2903.74	Pressurized cylinders, ISO tanks
Dichloropentafluoropropane	C <sub>3</sub> HF <sub>5</sub> Cl <sub>2</sub>	HCFC-225ca	0.025	122	422-56-0	Not established	2903.49	2903.75	Drums, truck or rail cisterns
Dichloropentafluoropropane	C <sub>3</sub> HF <sub>5</sub> Cl <sub>2</sub>	HCFC-225cb	0.033	595	507-55-1	Not established	2903.49	2903.75	Drums, truck or rail cisterns

1. According to the Montreal Protocol

2. According to WMO's Scientific Assessment (2006)

3. Code 2903.79 covers also other HCFCs which have not been assigned a separate HS code



## Annex 2

### List of the most commonly used refrigeration mixtures containing HCFCs

(HCFC = hydrochlorofluorocarbon, HFC = hydrofluorocarbon, PFC = perfluorocarbon, HC = hydrocarbon)

ASHRAE number	Other names	Composition, substances	Composition, %	HS code
R-401A	MP-39	HCFC-22/HFC-152a/HCFC-124	53/13/34	3824.74
R-401B	MP-66	HCFC-22/HFC-152a/HCFC-124	61/11/28	3824.74
R-401C	MP-52	HCFC-22/HCFC-152a/HCFC-124	33/15/52	3824.74
R-402A	HP-80	HFC-125/HC-290/HCFC-22	60/2/38	3824.74
R-402B	HP-81	HFC-125/HC-290/HCFC-22	38/2/60	3824.74
R-403A	69-S	HC-290/HCFC-22/PFC-218	5/75/20	3824.74
R-403B	69-L	HC-290/HCFC-22/PFC-218	5/56/39	3824.74
R-406A	GHG-12	HCFC-22/HC-600a/HCFC-142b	55/4/41	3824.74
R-408A	FX-10	HFC-125/HFC-143a/HCFC-22	7/46/47	3824.74
R-409A	FX-56	HCFC-22/HCFC-124/1HCFC-142b	60/25/15	3824.74
R-409B	FX-57	HCFC-22/HCFC-124/HCFC-142b	65/25/10	3824.74
R-411A	G-2018A	HC-1270/HCFC-22/HFC-152a	1.5/87.5/11.0	3824.74
R-411B	G-2018B	HC-1270/HCFC-22/HFC-152a	3/94/3	3824.74
R-412A	TP5R	HCFC-22/PFC-218/HCFC-142b	70/5/25	3824.74
R-414A	-	HCFC-22/HCFC-124/HC-600a/HCFC-142b	51.0/28.5/4.0/16.5	3824.74
R-414B	Hotshot	HCFC-22/HCFC-124/HC-600a/HCFC-142b	50,0/39,0/1,5/9,5	3824.74
R-415A	-	HCFC-22/HFC-152a	82,0/18,0	3824.74
R-416A	-	HCFC-134a/HCFC-124/HC-600	59,0/39,5/1,5	3824.74
R-418A	-	HC-290/HCFC-22/HFC-152a	1,5/96,0/2,5	3824.74

### Annex 3— List of the most commonly used products or equipment that may contain HCFCs or rely on HCFCs (the list is not exhaustive)

## Monitoring trade in HCFCs

HS code	Brief description of product or equipment (based on the HS classification)	Comments
All codes under: 3208, 3209, 3210 and 3212.90	Paints and varnishes	Paints, varnishes and non-aqueous pigment dispersions of all kind may contain HCFCs as solvents. If delivered in spray cans, HCFCs may be used as propellants. <sup>1</sup>
3403.11 and 3403.91	Lubricating preparations and preparations of a kind used for the oil or grease treatment of textile materials, leather, furskins or other materials Other preparations used for such purposes	HCFCs may be components of such preparations, e.g. preparations used for dry cleaning or degreasing <sup>1</sup>
3814.00	Organic composite solvents and thinners, not elsewhere specified or included; prepared paint or varnish removers	HCFCs may be components of such composite solvents or thinners <sup>1</sup>
3824.90	Prepared binders for foundry moulds or cores; Chemical products and preparations of the chemical or allied industries, not elsewhere specified or included	HCFCs may be components of such chemical products and preparations. <sup>1</sup> Note that refrigeration mixtures containing HCFCs are classified under specific HS codes (3824.74, or 3824.71 if containing CFCs)
3825.10	Municipal waste	Concerns waste that may contain HCFCs, e.g., demolition waste (foams) or refrigeration appliances
3825.41	Waste organic solvents, halogenated	Concerns such residual products, specifically waste organic solvents, which may contain HCFCs <sup>1</sup>
3909.50	Polyurethanes	Polyol blends used for polyurethane foam manufacturing containing HCFCs (usually HCFC-141b) may be classified under this code. <sup>2</sup> One component polyurethane foams in aerosol cans containing HCFCs as propellants may also be classified under this code.
3921.11, 3921.12, 3921.13, 3921.14, 3921.19	Other films, sheets, foil and strip of plastics	Concerns foams blown with HCFCs, including polyurethane foams
All codes under 8415	Air conditioning machines, comprising a motor-driven fan and elements for changing the temperature and humidity	Concerns AC machinery equipment that may contain or rely on HCFCs
All codes under 8418	Refrigerators, freezers and other refrigerating or freezing equipment, electric or other and heat pumps of all kind	Concerns refrigeration and heat pump equipment that may contain or rely on HCFCs
8419.60	Machinery for liquefying air or other gases	Concerns machinery that may contain or rely on HCFCs
8424.10	Fire extinguishers	Concerns mechanical appliances that may contain or rely on HCFCs
8424.90	Parts (of machinery equipment under 8424)	Concerns parts which may rely on HCFCs
8451.10	Dry-cleaning machines	Concerns dry cleaning machines that may rely on HCFCs

8476.21	Automatic beverage-vending machines incorporating heating or refrigerating devices	Concerns machines that may rely on HCFCs
8476.81	Other automatic goods-vending machines, incorporating heating or refrigerating devices	Concerns machines that may rely on HCFCs
8476.90	Parts of machines classified under 8476	Concerns parts which may rely on HCFCs
8477.80	Machinery for working rubber or plastics or for the manufacture of products from these materials	Concerns machinery that may contain or rely on HCFCs, specifically machinery for producing polyurethane foams blown with HCFCs
All codes under 8601 to 8607	Locomotives, railway or tramway passenger coaches, service vehicles or goods vans and wagons of all kind	Concerns goods that may contain RAC equipment that may rely on HCFCs
8609.00	Containers (including containers for the transport of fluids) specially designed and equipped for carriage by one or more modes of transport.	Concerns containers that may rely on HCFCs
All codes under 8701 to 8705	Tractors, motor vehicles, motor cars	Concerns goods that may contain RAC equipment that may rely on HCFCs or foamed products (eg. refrigerator insulation or seats) that may contain HCFCs
All codes under 8708	Parts and accessories of goods classified under 8701 to 8705	Concerns RAC equipment or foamed products that may rely on HCFCs
All codes under 8709	Works trucks	Concerns goods that may contain AC equipment that may rely on HCFCs
8710.00	Tanks or other armoured fighting vehicles	Concerns goods that may contain AC equipment that may rely on HCFCs
All codes under 8716	Trailers or semitrailers	Concerns goods that may contain RAC equipment that may rely on HCFCs or foamed products (eg. refrigerator insulation or seats) that may contain HCFCs
All codes under 8802	Other aircraft and spacecraft	Concerns goods that may contain RAC equipment that may rely on HCFCs or foamed products (eg. refrigerator insulation or seats) that may contain HCFCs
All codes under 8901 and 8902	Cruise ships, excursion boats, ferry boats, cargo ships tankers, refrigerated vessels, fishing vessels	Concerns goods that may contain RAC equipment that may rely on HCFCs or foamed products (eg. refrigerator insulation or seats) that may contain HCFCs
8903.91, 8903.92	Sailboats and motorboats for pleasure or sports	Concerns goods that may contain RAC equipment that may rely on HCFCs or foamed products (eg. refrigerator insulation or seats) that may contain HCFCs
8904, 8905	Tugs and pusher craft; Light-vessels, fire-floats, dredgers, floating cranes, etc.	Concerns goods that may contain RAC equipment that may rely on HCFCs or foamed products (eg. refrigerator insulation or seats) that may contain HCFCs
8906.10	Warships	Concerns goods that may contain RAC equipment that may rely on HCFCs or foamed products (eg. refrigerator insulation or seats) that may contain HCFCs

1. If such preparation or mixture containing HCFC is shipped in a container used for transportation or storage it should be treated as "mixture containing HCFC", not as "product containing HCFC" and the restrictions in country's domestic legislation related to HCFCs (also contained in mixtures) shall apply. See: Paragraph 4 of the Decision XIV/7 of the Parties to the Montreal Protocol.

2. Other classification may be 3824-90. Based on Decision I/12A of the Parties to the MP, in most of the countries those blends will be classified as "products containing HCFCs", not "mixtures containing HCFCs".



**Annex 4 - Extract of the text of the Recommendation of 26 June 2009 of the Customs Co-operation Council concerning amendments to the HS Nomenclature which will enter into force on 1 January 2012 and which introduce changes in the classification of HCFCs, CFCs and other ozone depleting substances (halons, HBFCs and BCM)**

**Subheadings 2903.4 to 2903.69.**

Delete and substitute :

“ - Halogenated derivatives of acyclic hydrocarbons containing two or more different halogens :

2903.71 -- Chlorodifluoromethane

2903.72 -- Dichlorotrifluoroethanes

2903.73 -- Dichlorofluoroethanes

2903.74 -- Chlorodifluoroethanes

2903.75 -- Dichloropentafluoropropanes

2903.76 -- Bromochlorodifluoromethane, bromotrifluoromethane and dibromotetrafluoroethanes

2903.77 -- Other, perhalogenated only with fluorine and chlorine

2903.78 -- Other perhalogenated derivatives

2903.79 -- Other

- Halogenated derivatives of cyclanic, cyclenic or cycloterpenic hydrocarbons :

2903.81 -- 1,2,3,4,5,6-Hexachlorocyclohexane (HCH (ISO)), including lindane (ISO, INN)

2903.82 -- Aldrin (ISO), chlordane (ISO) and heptachlor (ISO)

2903.89 -- Other

- Halogenated derivatives of aromatic hydrocarbons :

2903.91 -- Chlorobenzene, *o*-dichlorobenzene and *p*-dichlorobenzene

2903.92 -- Hexachlorobenzene (ISO) and DDT (ISO) (clofenotane (INN), 1,1,1-trichloro-2,2-bis(*p*-chlorophenyl)ethane)

2903.99 -- Other”.

## Annex 5 – HS codes of the most commonly used substitutes for HCFCs and HCFC-containing mixtures

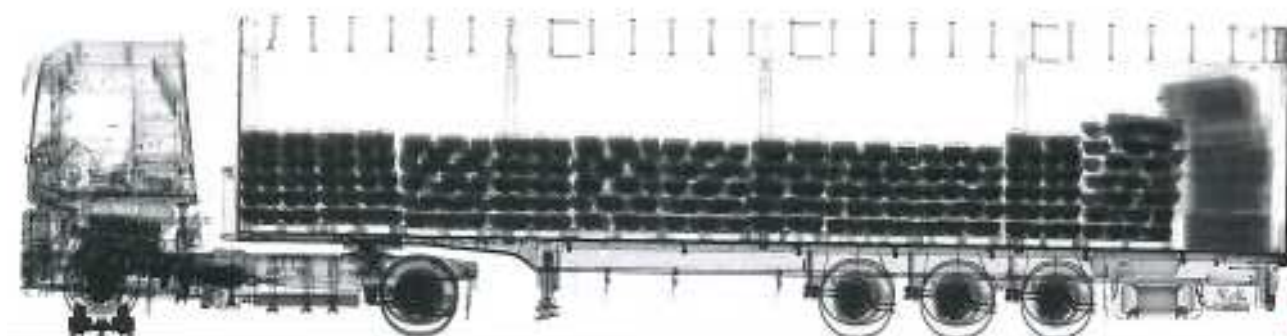
ASHRAE number	Other names	Composition, substances	Composition, %	HS code
R-401A	MP-39	HCFC-22/HFC-152a/HCFC-124	53/13/34	3824.74
R-23	HFC-23	Trifluoromethane	-	2903.39
R-32	HFC-32	Difluoromethane	-	2903.39
R-125	HFC-125	Pentafluoroethane	-	2903.39
R-134a	HFC-134a	1,1,1,2-tetrafluoroethane	-	2903.39
R-143a	HFC-143a	1,1,1-trifluoroethane	-	2903.39
R-152a	HFC-152a	1,1-difluoroethane	-	2903.39
R-227ea	HFC-227ea, FM-200	1,1,1,2,3,3,3-heptafluoropropane	-	2903.39
R-245fa	HFC-245fa	1,1,1,3,3-pentafluoropropane	-	2903.39
R-600a	-	Isobutane	-	2711.13
R-290	-	Propane	-	2711.12
R-1270	-	Propylene	-	2711.14
R-404A	FX-70	HFC-125/HFC-143a/HFC-134a	44/52/4	3824.78
R-407A	-	HFC-32/HFC-125/HFC-134a	20/40/40	3824.78
R-407B	-	HFC-32/HFC-125/HFC-134a	10/70/20	3824.78
R-407C	-	HFC-32/HFC-125/HFC-134a	23/25/52	3824.78
R-410A	-	HFC-32/HFC-125	50/50	3824.78
R-417A	-	HFC-125/HFC-134a/R-600	46.6/50/3.4	3824.78
R-421A	-	HFC-125/HFC-134a	58/42	3824.78
R-422A	MO79	HFC-134a/HFC-125/R600a	11.5/85.1/3.4	3824.78
R-422D	MO29	HFC-134a/HFC-125/R600a	31.5/65.1/3.4	3824.78
R-507A	-	HFC-125/HFC-143a	50/50	3824.78
R-508A	-	HFC-23/HFC-116	39/61	3824.78

## Annex 6 - A recently revealed case of illegal trade in HCFCs

### Seizure of 1150 cylinders containing 15.6 tonnes of HCFC-22 refrigerant

The Finnish Customs Services in Vaalimaa in cooperation with the Finnish Environment Institute recently reported a seizure of more than 15 tonnes of R22, a hydrochlorofluorocarbon (HCFC) used as a refrigerant and a foam blowing agent. R22 is an ozone-depleting and global warming gas whose production, consumption and trade are strictly controlled under the Montreal Protocol and by European Union regulations.

On 27<sup>th</sup> of February 2011 a truck coming from Latvia tried to cross – allegedly by accident - the Vaalimaa Customs checkpoint in Eastern Finland which is the primary customs and border-crossing between the European Union and the Russian Federation. Because of the suspicious behavior of the driver, the truck was scanned (see photo) and 1150 refrigerant cylinders of 13,6 kg each were detected – in total 15,64 tonnes. The cylinders and their packaging were labeled R22 and hidden behind a cover cargo of glass- and ceramic ornaments and other decorative products. The analysis at the Customs Laboratory confirmed that the cylinders actually contained R22. The R22 cylinders were mis-declared and did not have any serial numbers. The goods have been seized and will eventually be destroyed. Investigations concerning the origin of the chemicals and the people involved in this smuggling case are ongoing.





## Annex 7 - List of countries which have applied the iPIC procedure in international trade in ODS – status on 31 October 2011

1.	Afghanistan	43.	Kyrgyzstan
2.	Albania	44.	Lao, People's Democratic Republic of
3.	Antigua and Barbuda	45.	Latvia <sup>1</sup>
4.	Armenia	46.	Lithuania <sup>1</sup>
5.	Australia <sup>1</sup>	47.	Luxemburg <sup>1</sup>
6.	Austria	48.	Malaysia
7.	Azerbaijan	49.	Maldives
8.	Bahamas	50.	Mali
9.	Barbados	51.	Malta <sup>1</sup>
10.	Belarus	52.	Mexico
11.	Belgium <sup>1</sup>	53.	Moldova, Republic of
12.	Belize	54.	Mongolia
13.	Bhutan	55.	Montenegro
14.	Brazil	56.	Myanmar
15.	Brunei Darussalam	57.	Netherlands <sup>1</sup>
16.	Bulgaria <sup>1</sup>	58.	New Zealand
17.	Cambodia	59.	Oman
18.	China (excluding Hong Kong and Macao)	60.	Panama
19.	Colombia	61.	Paraguay
20.	Costa Rica	62.	Peru
21.	Croatia	63.	Philippines
22.	Cyprus <sup>1</sup>	64.	Poland <sup>1</sup>
23.	Czech Republic <sup>1</sup>	65.	Portugal <sup>1</sup>
24.	Denmark <sup>1</sup>	66.	Romania <sup>1</sup>
25.	Estonia <sup>1</sup>	67.	Saint Lucia
26.	Fiji	68.	Saint Vincent and the Grenadines
27.	Finland <sup>1</sup>	69.	Serbia
28.	France <sup>1</sup>	70.	Singapore
29.	Germany <sup>1</sup>	71.	Slovakia <sup>1</sup>
30.	Greece <sup>1</sup>	72.	Slovenia <sup>1</sup>
31.	Guyana	73.	Spain <sup>1</sup>
32.	Hungary <sup>1</sup>	74.	Sri Lanka
33.	Indonesia	75.	Sweden <sup>1</sup>
34.	Iran (Islamic Republic of)	76.	Tajikistan
35.	Ireland <sup>1</sup>	77.	Thailand
36.	Israel	78.	Trinidad and Tobago
37.	Italy <sup>1</sup>	79.	Turkmenistan
38.	Jamaica	80.	United Kingdom <sup>1</sup>
39.	Japan	81.	Uruguay
40.	Kazakhstan	82.	Uzbekistan
41.	Korea, Democratic People's Republic of	83.	Venezuela, Bolivarian Republic of
42.	Korea, Republic of	84.	Viet Nam

<sup>1</sup>. Trade in ODS with these countries – European Union Member States - is based on import and export licenses issued by European Commission

## New HS classification for ODS

Since the last Harmonized System (HS) revision in 2007, trade patterns in ozone depleting substances (ODS) have changed with the complete phase-out of chlorofluorocarbons (CFCs) as of 1<sup>st</sup> January 2010 (except for a few exempted uses) and the increased trade in hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs) as replacement chemicals.

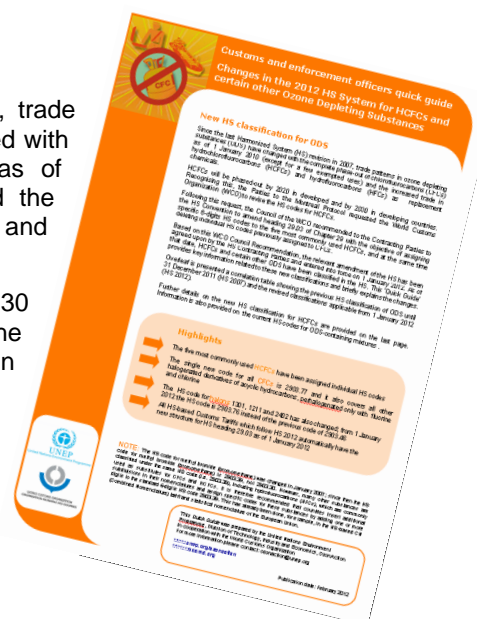
HCFCs will be phased-out by 2020 in developed and by 2030 in developing countries. Recognising this, the Parties to the Montreal Protocol requested the World Customs Organization (WCO) to revise the HS codes for HCFCs.

Following this request, the Council of the WCO recommended to the Contracting Parties to the HS Convention to amend heading 29.03 of Chapter 29 with the objective of assigning specific 6-digit HS codes to the five most commonly used HCFCs, and at the same time deleting individual HS codes previously assigned to CFCs.

Based on this WCO Council Recommendation, the relevant amendment of the HS has been agreed upon by the HS Contracting Parties and entered into force on 1 January 2012. As of that date, HCFCs and certain other ODS have been separately identified in the HS.

Further details on the new HS classification for HCFCs can be found in the *"Customs and enforcement officers quick guide Changes in the 2012 HS Nomenclature for HCFCs and certain other Ozone Depleting Substances"* which includes a correlation table showing the previous HS classification of ODS until 31 December 2011 (HS 2007) and the revised classifications applicable from 1 January 2012 (HS 2012).

[www.unep.fr/ozonaction/information/mmcfles/7532-e-2012-HS-Codes-for-ODS.pdf](http://www.unep.fr/ozonaction/information/mmcfles/7532-e-2012-HS-Codes-for-ODS.pdf)



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