

The Harmonized Commodity Description and Coding System – often referred to “Harmonized System” or simply “HS” – is an international product nomenclature developed and maintained by the World Customs Organization (WCO). More than 200 countries and economies, representing more than 98% of world trade, use the HS for their Customs tariff and collection of international trade statistics (WCO 2011a). The HS is made of about 5,000 commodity groups; each identified by a six digit code to achieve uniform classification worldwide. However, countries are free to add subdivisions classifying goods beyond that of the six-digit numerical code set out by the International Convention on the Harmonized System (WCO 2011b).

HS 2012 – the fifth edition of HS – entered into force on 1 January 2012. Many of 225 amendments of HS 2012 are on environmental and social issues, relating to the classification of food security and agriculture, chemicals and pesticides covered by the Rotterdam Convention, and ozone depleting substances (ODS) controlled by the Montreal Protocol.

In view of quickly growing quantities of HCFCs being traded globally and of diminishing trade in CFCs due to its phase out starting 1 January 2010, HS 2012 features new, individual codes for 5 most commonly used HCFCs while merging subheadings for CFCs into one. The following table shows the correlation between the 2002, 2007 and 2012 editions on HS subheadings for ODS:

| ODS | Chemical name | Formula | 2002 HS | 2007 HS | 2012 HS | Remarks |
|---|----------------------------|---|------------|---------|---------|--|
| Annex A, Group I (CFCs) | | | | | | |
| CFC-11 | Trichlorofluoromethane | CFCl ₃ | 2903.41.00 | 2903.41 | 2903.77 | Subheadings for Annex A Group I – CFCs (2903.41-2903.44) have been merged into one subheading 2903.77. |
| CFC-12 | Dichlorodifluoromethane | CF ₂ Cl ₂ | 2903.42.00 | 2903.42 | 2903.77 | |
| CFC-113 | Trichlorotrifluoroethanes | C ₂ F ₃ Cl ₃ | 2903.43.00 | 2903.43 | 2903.77 | |
| CFC-114 | Dichlorotetrafluoroethanes | C ₂ F ₄ Cl ₂ | 2903.44.10 | 2903.44 | 2903.77 | |
| CFC-115 | Chloropentafluoroethane | C ₂ F ₅ Cl | 2903.44.90 | 2903.44 | 2903.77 | |
| Annex A, Group II (Halon) | | | | | | |
| Halon-1211 | Bromochlorodifluoromethane | CF ₂ BrCl | 2903.46.10 | 2903.46 | 2903.76 | Subheading for Annex A Group II (2903.46) has been renumbered as 2903.76. |
| Halon-1301 | Bromotrifluoromethane | CF ₃ Br | 2903.46.20 | 2903.46 | 2903.76 | |
| Halon-2402 | Dibromotetrafluoroethanes | C ₂ F ₄ Br ₂ | 2903.46.90 | 2903.46 | 2903.76 | |
| Annex B, Group I (Other CFCs) | | | | | | |
| CFC-13 | Chlorotrifluoromethane | CF ₃ Cl | 2903.45.10 | 2903.45 | 2903.77 | Subheading for Annex B Group I – Other CFCs (2903.45) have been merged into new subheading 2903.77. |
| CFC-111 | Pentachlorofluoroethane | C ₂ FCl ₅ | 2903.45.15 | 2903.45 | 2903.77 | |
| CFC-112 | Tetrachlorodifluoroethane | C ₂ F ₂ Cl ₄ | 2903.45.20 | 2903.45 | 2903.77 | |
| CFC-211, CFC-212, CFC-213, CFC-214, CFC-215, CFC-216, and CFC-217 | | | | 2903.45 | 2903.77 | |
| Annex B, Group II | | | | | | |
| Carbon Tetrachloride | | CCl ₄ | 2903.14.00 | 2903.14 | 2903.14 | No change |
| Annex B, Group III | | | | | | |
| 1,1,1-trichloroethane (methyl chloroform) | | C ₂ H ₃ Cl ₃ | 2903.19.10 | 2903.19 | 2903.19 | No change |

| ODS | Chemical name | Formula | 2002 HS | 2007 HS | 2012 HS | Remarks |
|--|-----------------------------|---|------------|---------|---------|--|
| Annex C, Group I (HCFCs) | | | | | | |
| HCFC-22 | Chlorodifluoromethane | CHF_2Cl | 2903.49.10 | 2903.49 | 2903.71 | Individual subheadings: 2903.71-2903.75 have been created for common HCFCs. For other HCFCs – new subheading 2903.79 is used instead of 2903.49. |
| HCFC-123 | Dichlorotrifluoroethanes | $\text{C}_2\text{HF}_3\text{Cl}_2$ | 2903.49.10 | 2903.49 | 2903.72 | |
| HCFC-141, 141b | Dichlorofluoroethanes | $\text{C}_2\text{H}_3\text{FCl}_2$, CH_3CFCl_2 | 2903.49.10 | 2903.49 | 2903.73 | |
| HCFC-142, 142b | Chlorodifluoroethanes | $\text{C}_2\text{H}_3\text{F}_2\text{Cl}$, $\text{CH}_3\text{CF}_2\text{Cl}$ | 2903.49.10 | 2903.49 | 2903.74 | |
| HCFC-225, 225ca, 225cb | Dichloropentafluoropropanes | $\text{C}_3\text{HF}_5\text{Cl}_2$, $\text{CF}_3\text{CF}_2\text{CHCl}_2$, $\text{CF}_2\text{ClCF}_2\text{CHClF}$ | 2903.49.10 | 2903.49 | 2903.75 | |
| HCFC-21, HCFC-31, HCFC-121, HCFC-122, HCFC-124, HCFC-131, HCFC-132, HCFC-133, HCFC-151, HCFC-221, HCFC-222, HCFC-223, HCFC-224, HCFC-226, HCFC-231, HCFC-232, HCFC-233, HCFC-234, HCFC-235, HCFC-241, HCFC-242, HCFC-243, HCFC-244, HCFC-251, HCFC-252, HCFC-253, HCFC-261, HCFC-262, HCFC-271 | | | 2903.49.10 | 2903.49 | 2903.79 | |
| Annex C, Group II (HBFCs) | | | | | | |
| All Hydrobromofluorocarbons | | | 2903.49.30 | 2903.49 | 2903.79 | Subheading for Annex C Group II: HBFCs has been merged into new subheading 2903.79. |
| Annex C, Group III | | | | | | |
| Bromochloromethane | | CH_2BrCl | 2903.49.80 | 2903.49 | 2903.79 | Subheading for Annex C Group III: BCM has been merged into new subheading 2903.79. |
| Annex E, Group I | | | | | | |
| Methyl bromide (MeBr) | | CH_3Br | 2903.30.33 | 2903.39 | 2903.39 | No change |

Since 1 January 2007, the HS classification of blends (i.e., mixtures) containing ODS has been in Chapter 38 for “Miscellaneous chemical products”, and remain unchanged in HS 2012 as follows:

| ODS blends | HS 2007 and HS 2012 |
|--|---------------------|
| Containing chlorofluorocarbons (CFCs), whether or not containing hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs) or hydrofluorocarbons (HFCs) | 3824.71 |
| Containing bromochlorodifluoromethane, bromotrifluoromethane or dibromotetrafluoroethane (= containing halons 1301, 1211 or 2402) | 3824.72 |
| Containing hydrobromofluorocarbons (HBFCs) | 3824.73 |
| Containing hydrochlorofluorocarbons (HCFCs), whether or not containing perfluorocarbons (PFCs) or hydrofluorocarbons (HFCs), but not containing chlorofluorocarbons (CFCs) | 3824.74 |
| Containing carbon tetrachloride | 3824.75 |
| Containing 1,1,1-trichloroethane (methyl chloroform) | 3824.76 |
| Containing bromomethane (methyl bromide; MeBr) or bromochloromethane | 3824.77 |

Advice for Ozone Officers

Since the HS code plays critical role in trade control and statistics, it is suggested that National Ozone Unit (NOU) should coordinate with Customs administration in their country to inform the ODS importer and exporter on the amendments of subheadings for ODS, in particular subheadings for HCFCs. The NOU should also review and amend related forms and documents to reflect the new HS codes, as needed. It is recommendable to complete the above before the national Customs administration starts the implementation of HS 2012.

The NOU may want to consult the Customs administration to designate separate subheading for additional HCFCs and HCFC blends if they are available in the local market. It is also useful to note that the HS code for methyl bromide (bromomethane) is 2903.39, where many other substances, including non-ODSs, e.g., hydrofluorocarbons (HFCs) are registered. It is therefore recommended that the individual countries assign specific codes for those substances under 2903.39 by adding two more digits to a standard 6 digits HS. This has already been done, for example, in a HS-based CN (Combined Nomenclature) system of classification of goods that is mandatory in the European Union.

References:

WCO, 2011a. What is the Harmonized System (HS)?, http://www.wcoomd.org/home_hsoverviewboxes_hsharmonizedsystem.htm, consulted on 17 October 2011.

WCO, 2011b. International Convention on the Harmonized System. http://www.wcoomd.org/home_hsoverviewboxes_tools_and_instruments_hsconvention.htm#ARTICLE_3, consulted on 17 October 2011.