

# Customs Quick Tool for Screening ODS

- Compare the packing list, bill of entry and the country of origin to make sure they match.
- Ensure the Customs code on the entry matches the description on the invoice.
- Compare the invoice and the bill of lading to the outward bound ship manifest.
- Verify the country of origin. Is the country a Party to the Montreal Protocol and its Amendments?
- Verify that the importer and place of business actually exist.
- Contact the licensing agency to verify that the importer is licensed to import that specific material.
- Note the quantity, source and destination of the ODS. These will serve as important clues to illegal imports.
- Verify with the ODS producer that the container number actually exists. The discovery of fictitious container numbers has led to the disclosure of illegal trade.
- Review all the necessary documents. If something does not match, it may be an illegal shipment. Inspect the merchandise.
- Check packaging, size and shape of the container and its label.
- Identify the name and description of the chemical, which should match ALL paperwork.
- Seize the material if the importer does not have the import/export licence.
- Co-ordinate this seizure with the Customs Officer, environmental agency and prosecution agency. Anyone involved with the seizure may be called to testify in court, so take good notes.

## Smuggling Schemes

- Front Door Smuggling
- Mislabelling as non-ODS
- Mislabelling as used, recovered, reclaimed or recycled ODS
- Concealment & double layering of ODS
- Diverting ODS from transshipment harbours or ODS produced for export-free trade zone
- Declared as equipment



## Stop the Smuggling of Ozone Depleting Substances

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Ozone Depleting Substances ODS							
Name/Group	Chemical name	Formula	ASHRAE # for refrigerants only	ASHRAE <sup>1</sup> safety group	CAS <sup>2</sup> #	UN <sup>3</sup> #	HS code Since 1 Jan 2012 / HS code Until 31 Dec 2011
<b>Annex A, Group I (CFCs)</b>							
CFC-11	Trichlorofluoromethane	CFCl <sub>3</sub>	R-11	A1	75-69-4	1017	2903.77 / 2903.41
CFC-12	Dichlorodifluoromethane	CF <sub>2</sub> Cl <sub>2</sub>	R-12	A1	75-71-8	1028	2903.77 / 2903.42
CFC-113	Trichlorotrifluoroethanes	C <sub>2</sub> F <sub>3</sub> Cl <sub>3</sub>	R-113	A1	76-13-1		2903.77 / 2903.43
CFC-114	Dichlorotetrafluoroethanes	C <sub>2</sub> F <sub>4</sub> Cl <sub>2</sub>	R-114	A1	76-14-2	1958	2903.77 / 2903.44
CFC-115	Chloropentafluoroethane	CClF <sub>2</sub> CF <sub>3</sub>	R-115	A1	76-15-3	1020	2903.77 / 2903.44
<b>Annex A, Group II (Halon)</b>							
Halon-1211	Bromochlorodifluoromethane	CF <sub>2</sub> BrCl	R-12B1		353-59-3	1974	2903.76 / 2903.46
Halon-1301	Bromotrifluoromethane	CF <sub>3</sub> Br	R-13B1		75-63-8	1009	2903.76 / 2903.46
Halon-2402	Dibromotetrafluoroethane	C <sub>2</sub> F <sub>4</sub> Br <sub>2</sub>	R-114B2		124-73-2		2903.76 / 2903.46
<b>Annex B, Group I (Other CFCs)</b>							
CFC-13	Chlorotrifluoromethane	CF <sub>3</sub> Cl	R-13	A1	75-72-9		2903.77 / 2903.45
<b>Annex B, Group II</b>							
Tetrachloromethane or carbon tetrachloride				CCl <sub>4</sub>	B1	56-23-5	1864 / 2903.14 / 2903.14
<b>Annex B, Group III</b>							
1,1,1-trichloroethane or methyl chloroform				C <sub>2</sub> H <sub>3</sub> Cl <sub>3</sub>	R-140a	71-55-6	2831 / 2903.19 / 2903.19
<b>Annex C, Group I (HCFCs)</b>							
HCFC-22	Chlorodifluoromethane	CHF <sub>2</sub> Cl	R-22	A1	75-45-6	1018	2903.71 / 2903.49
HCFC-123	Dichlorotrifluoroethanes	C <sub>2</sub> HF <sub>2</sub> Cl <sub>2</sub>	R-123	B1	306-83-2		2903.72 / 2903.49
HCFC-124	Chlorotetrafluoroethanes	C <sub>2</sub> HF <sub>2</sub> Cl	R-124	A1	2837-89-0		2903.79 / 2903.49
HCFC-141	Dichlorofluoroethanes	C <sub>2</sub> H <sub>3</sub> FCl <sub>2</sub>	R-141		1717-00-6		2903.73 / 2903.49
HCFC-141b	1,1-dichloro-1-fluoroethane	CH <sub>3</sub> CFCl <sub>2</sub>	R-141b	A2	1717-00-6		2903.73 / 2903.49
HCFC-142	Chlorodifluoroethanes	C <sub>2</sub> H <sub>3</sub> F <sub>2</sub> Cl	R-142		75-68-3		2903.74 / 2903.49
HCFC-142b	1-chloro-1,1-difluoroethane	CH <sub>3</sub> CF <sub>2</sub> Cl	R-142b	A2	75-68-3		2903.74 / 2903.49
HCFC-225	Dichloropentafluoropropanes	C <sub>3</sub> HF <sub>5</sub> Cl <sub>2</sub>	R-225		127564-92-5		2903.75 / 2903.49
<b>Annex C, Group II (HBFCs)</b>							
HBFC-22B1	Bromodifluoromethane	CHF <sub>2</sub> Br					2903.79 / 2903.49
<b>Annex C, Group III</b>							
Bromochloromethane				CH <sub>2</sub> BrCl			2903.79 / 2903.49
<b>Annex E, Group I</b>							
Methyl bromide (or Bromomethane)				CH <sub>3</sub> Br		74-83-9	1062 / 2903.39 / 2903.39
<b>The most common ODS containing blends (Refrigerants)</b>							
R-500 <sup>5</sup>	CFC-12 / HFC-152a		R-500	A1	**		3824.71 / 3824.71
R-502 <sup>5</sup>	HCFC-22 / CFC-115		R-502	A1	**	1973	3824.71 / 3824.71
R-401A (MP-39)	HCFC-22/HFC-152a/HCFC-124		R-401A	A1	**		3824.74 / 3824.74
R-406A	R-22/R-600a/R-142b (55/04/41)		R-406A	A2			3824.74 / 3824.74
R-408A (FX 10)	HCFC-22/HFC-143a/HFC-125		R-408A	A1	**		3824.74 / 3824.74
R-409A (FX 56)	HCFC-22 / HCFC-124/HCFC-142b		R-409A	A1	**		3824.74 / 3824.74
R-415B	R-22/R-152a (25/75)		R-415B	A2			3824.74 / 3824.74
R-418A	HC-290/HCFC-22/HFC-152a		R-418A	A2	**		3824.74 / 3824.74

Most popular refrigerants trade names
ARCTON - ASAHIFRON - ASAHIKLIN - FORANE - FREON - GENETRON - ISCEON - SOLKANE - SUVA - FLORON

### DANGER SYMBOLS

- Toxic substances
- Flammable substances
- Explosive substances
- Oxidizing substances
- Corrosive substances
- Irritating substances
- Substances hazardous to aquatic environment
- Pressurized Gases
- Hazardous to Health

### Countries that produce ODS

Source: Article 7 data for 2014 reporting year, only countries with positive production figures.

Group	Producing Countries
Chlorofluorocarbons (CFCs)	China, Russian Federation
Halons	None
Carbon tetrachloride (CCl <sub>4</sub> )	China, France, Japan
Hydrochlorofluorocarbons (HCFCs)	Argentina, Canada, China, Democratic People's Republic of Korea, France, India, Japan, Mexico, Netherlands, Republic of Korea, Russian Federation, United States of America, Venezuela
Methyl Bromide	China, Israel, United States of America

### HS codes for selected products that may contain ODS (list is not exhaustive)

Product	HS code/codes
AC systems (including components and parts)	All codes under 84.15
Refrigerators & Freezers	84.18, 84.19, 85.10
Compressors of a kind used in refrigeration equipment	8414.30
Vehicles	CHAPTER 87
Fire Extinguishers	8424.10
Insulating boards & pipe covers	39.17, 39.20, 39.21, 39.25, 39.26
Polyurethanes	3909.50
Composite solvents	3814.00
Dehumidifiers*	8509, 8479
Pre-blended polyols	3907

\* Air dehumidifiers can be classified in heading 84.79 (under the residual subheading 8479.89), while certain types could also fall under 85.09 (subheading 8509.80), as electro-mechanical domestic appliances, with self-contained electric motor, provided their weight is **20kg** or less. Heading 85.09 has priority over heading 84.79.

### Selected Non-Ozone Depleting Substances<sup>4</sup>

Name/Group	Chemical name	Formula	ASHRAE # for refrigerants only	ASHRAE <sup>1</sup> safety group	CAS <sup>2</sup> #	UN <sup>3</sup> #	HS code
<b>Hydrofluorocarbon (HFC)</b>							
HFC-134a	1,1,1,2-Tetrafluoroethane	CF <sub>3</sub> CH <sub>2</sub> F	R-134a	A1	811-97-2	3159	2903.39
HFC-152a	1,1-Difluoroethane	CHF <sub>2</sub> CH <sub>3</sub>	R-152a	A2	75-37-6		2903.39
HFC-125	Pentafluoroethane	CF <sub>3</sub> CHF <sub>2</sub>	R-125	A1	354-33-6		2903.39
HFC-143a	1.1.1-Trifluoroethane	CF <sub>3</sub> CH <sub>3</sub>	R-143a	A2L	420-46-2		2903.39
HFC-32	Difluoromethane	CH <sub>2</sub> F <sub>2</sub>	R-32	A2L	75-10-5		2903.39
HFC-23	Trifluoromethane	CHF <sub>3</sub>	R-23	A1	75-46-7		2903.39
HFC-245fa	1,1,1,3,3-Pentafluoropropane	CF <sub>3</sub> CH <sub>2</sub> CHF <sub>2</sub>	R-245fa	B1	460-73-1		2903.39
HFC-1,2,3,4yf	2,3,3,3-Tetrafluoropropene	CF <sub>3</sub> CF=CH <sub>2</sub>	R-1,2,3,4yf	A2L	754-12-1		2903.39
<b>Hydrofluorocarbons blends (HFC mixtures)</b>							
R-404A	R143a/125/134a		R-404A	A1	**		3824.78
R-507A	R143a/125		R-507A	A1	**		3824.78
R-407A	R32/125/134a		R-407A	A1	**		3824.78
R-407B	R32/125/134a		R-407B	A1	**		3824.78
R-407C	R32/125/134a		R-407C	A1	**		3824.78
R-410A	R32/125		R-410A	A1	**		3824.78
R-508A	R23/116		R-508A	A1	**		3824.78
R-508B	R23/116		R-508B	A1	**		3824.78
<b>Halogen-free Refrigerants</b>							
R-717	Ammonia	NH <sub>3</sub>	R-717	B2L	7664-41-7	1005	2814.10
R-744	Carbon dioxide	CO <sub>2</sub>	R-744	A1	124-38-9		2811.21
HC-600	Butane	CH <sub>3</sub> CH <sub>2</sub> CH <sub>2</sub> CH <sub>3</sub>	R-600	A3	106-97-8		2901.10*
HC-600a	Iso-Butane	C <sub>4</sub> H <sub>10</sub>	R-600a	A3	75-28-5	1969	2901.10*
HC-290	Propane	C <sub>3</sub> H <sub>8</sub>	R-290	A3	74-98-6	1978	2711.12

\*The HS Code applies only if the concentration of butane or Iso-butane is **higher than 95%**. Otherwise, the substance should be classified in the specific provision of subheading 2711.13 for "Butanes".

Footnotes	
1- ASHRAE Safety Groups (ASHRAE: American Society for Heating Refrigeration & Air-conditioning Engineers):	
<b>A1</b>	Lower Toxicity & No Flammability
<b>A2L</b>	Lower Toxicity & Lower Flammability
<b>A2</b>	Lower Toxicity & Flammable
<b>A3</b>	Lower Toxicity & Higher Flammability
<b>B1</b>	Higher Toxicity & No Flammability
<b>B2L</b>	Higher Toxicity & Lower Flammability
<b>B2</b>	Higher Toxicity & Flammable
<b>B3</b>	Higher Toxicity & Higher Flammability
2- CAS #: Chemical Abstract Service Number	
3- UN #: United Nations Number for some Chemicals	
4 - Their HS codes may be used to disguise ODS	
5 - International trade not allowed (contains CFCs)	
** CAS # for blend is combined of the CAS # of its components (Example: R-500 CAS # is: 75-71-8 / 75-37-6 which CAS # for both CFC-12 & HFC-152a)	



## Protect the Ozone Layer :

### Stop the Smuggling of Ozone Depleting Substances!

## United Nations Environment Programme - OzonAction