RESOLUTION OF THE GOVERNMENT OF MONGOLIA

September 5, 2018 Ulaanbaatar city

Number 277

APPROVAL OF PROCEDURES AND LIST

Based on Article 25.1 of the Law on Air, the Government of Mongolia DECIDES:

1. “Procedure for issuing licenses for import, sale and use of ozone depleting substances and other substitutes and equipment containing them” in Annex 1, “List of ozone depleting substances” in Annex 2, “List of ozone depleting substances” ”In accordance with Annex 3 and“ List of equipment containing ozone depleting substances and other substitutes ”in accordance with Annex 4.

2. The Minister of Nature, Environment and Tourism N.Tserenbat, the General Customs Agency B.Asralt and the General Specialized Inspection Agency N.Tsagaankhuu shall be responsible for organizing and monitoring the implementation of the regulation.

3. In connection with the issuance of this resolution, Government Resolution No. 104 of June 23, 1999 “On Approval of Regulations” shall be considered invalid from January 1, 2019.

4. This resolution shall come into force on January 1, 2019.

PRIME MINISTER OF MONGOLIA U.KHURELSUKH,
MINISTER OF ENVIRONMENT AND TOURISM N. TSERENBAT

Government Resolution No. 277 of 2018
Annex 4 to the resolution

OZONE DECORATIVE SUBSTANCES AND OTHER SUBSTITUTES
LIST OF STORAGE EQUIPMENT

D / d	BTCS code	Product and equipment name	Types of OZ and substitutes
	CHAPTER I.		

1.	Equipment for the production of foam with HCFC-22 and HCFC-141b, which are harmful to the ozone layer and global warming (included in the “Coded List of Goods Prohibited from Crossing the Border of Mongolia” approved by Government Resolution No. 54 of 2001)		
	SECTION II		
1.	8415.10.00	Ventilation systems installed in a single ger or with a "distribution system" designed to be attached to windows, walls, ceilings or floors	HCFC-22, R-410A, R-407C, HFC-161, HFC-32, HC-290 and others
2.	8415.20.00	Vehicle air conditioning	
3.	8415.81.00	Ventilation device with cooling device and valve for adjusting cold / heat flow circulation (adjustable heat pump)	
4.	8415.82.00	Ventilation equipment other than refrigeration and air / cold / heat flow control valves	
5.	8415.90.00	Ventilation motor	
6.	8418.10.00	Refrigerator-freezer with separate door	HFC-134a, HC-600a, HC-290 and others
7.	8418.21.00	Household pump refrigerator	
8.	8418.29.00	Household refrigerators other than pumps	
9.	8418.30.00	Box-type freezer with a capacity of no more than 800 liters	
10.	8418.40.00	Vertical freezer with a capacity of not more than 900 liters	

11.	8418.50.10	A platform equipped with a cooling or freezing device	R-404A, HFC-134a, HC-290, R-744 (CO2), R-717, R-507A and others
12.	8418.50.20	Booths equipped with refrigeration or freezing devices	
13.	8418.50.30	Cabinets equipped with a cooling or freezing device	
14.	8418.50.90	Other furniture for storage or display, equipped with refrigeration or freezing equipment	
15.	8418.61.00	Heat pumps other than air conditioners in accordance with Article 84.15	R-404A, HFC-134a R-744, R717 and others
16.	8418.69.00	Other refrigeration or freezing devices	
17.	8418.99.10	Cooling or freezing device motor	
18.	8414.30.00	Compressor for refrigeration equipment	
19.	8419.60.00	Air or other gas liquefaction equipment	R-404A, HFC-134a and others
20.	8424.10.00	Fire extinguisher	HFC-227ea, HFC-12, HFC-23 and others
21.	8476.21.00	Beverage vending machines	R-404A, HFC-134a R-744 and others
22.	8476.81.00	Other vehicles with heating or cooling devices for automatic sale of goods	
23.	8451.10.00	Dry cleaning equipment	Carbons, (HCs), R-744 and others

24.	8477.10.00	Pressure printing machine for the production of foam using a foaming agent, which is not harmful to the ozone layer and has little effect on global warming	HFC-134a, HFC-152a, HFO-1234ze and others HFC-245fa, HFC-365mfc / HFC-227ea HFO-1233zd HFO-1336mzz and others
25.	8477.20.00	Extruder for the production of foam using a foaming agent that is not harmful to the ozone layer and has little effect on global warming	
26.	8477.30.00	Blow molding machine for the production of foam using a foaming agent that is not harmful to the ozone layer and has a low impact on global warming	
27.	8609.00.00	Refrigerated container	HFC-134a, HFC-452A, HFC-404A, HFC-513A, R-744, HFC-290
28.	3907.20.00	Polyol, a mixture of polyols	Cyclopentane Blends R-611 (Methyl Formate) Dimethoxymethane (Methylal) HFO-1234ze (E) and others Dimethyl ether (Di-methyl Ether- R-E170) HFC-152a HFC-227ea, HFC-245fa, HFC-365mfc HC-601a, R-1130 (E)
29.	3909.50.00	Polyurethane	
30.	3921.11.00	Styrene polymer sheets, sheets and ribbons	
31.	3921.13.00	Polyurethane sheets, sheets and tape	

Annex 1 to Government Resolution No. 277 of 2018

PROCEDURE FOR PERMISSION OF IMPORT
, SALE AND
USE OF EQUIPMENT CONTAINING OZONE DECORATIVE SUBSTANCES AND OTHER SUBSTITUTES

One. General grounds

1.1. In order to fulfill its obligations under the Vienna Convention for the Protection of the Ozone Layer and the Montreal Protocol on Substances that Deplete the Ozone Layer, and to implement the National Program for the Protection of the Ozone Layer, other ozone depleting substances and adverse effects on global warming This regulation shall regulate the issuance and revocation of licenses for import, sale and use of substitutes and equipment containing them, determination of the quantity for the given year and control over their use.

1.2. This regulation shall follow the Law on Air, the Law on Business Licensing, the Law on Toxic and Hazardous Chemicals, the Law on State Stamp Duty, the Law on Waste, the Law on Violations, and the rules and regulations issued in accordance with them.

Two. Requirements for citizens, business entities and organizations licensed to import, sell and use equipment containing ozone depleting substances and other substitutes

2.1. General requirements for citizens, business entities and organizations

2.1.1. Follow the “Rules for installation and safe use of pressure vessels”;

2.1.2. General requirements for labor safety, hygiene, storage of toxic and hazardous chemicals and products in warehouses must meet the standard MNS: 6458: 2014;

2.1.3. Business entities and organizations engaged in the repair and maintenance of refrigeration and ventilation using ozone depleting substances and other substitutes shall have a certified repairman, engineer and technician;

2.1.4. Business entities and organizations included in the volume of import of ozone depleting substances and other substitutes, products and equipment containing them shall prepare relevant reports on consumption and consumption of imported, sold and used substances of the previous year and sales and supply of equipment containing them in accordance with the form. to submit to the state central administrative body in charge of nature and environment by December 30 of each year;

2.1.5. Business entities and organizations that have submitted their reports, except for newly established legal entities, within the period specified in 2.1.4 of this Article, shall have the right to be covered by the number and amount of imports for the next year.

2.2. Requirements for the sale of ozone depleting substances and other substitutes:

2.2.1. not to sell substances to citizens, business entities and organizations without a use permit;

2.2.2. When selling ozone-depleting substances and other substitutes, a licensed citizen, business entity or organization shall make 2 copies of the address, name, type, amount and intended use of the person who purchased the substance, and keep one copy for the buyer and the other copy for himself / herself;

2.2.3. the substance shall have special packaging and addresses and labels in English, Russian and Mongolian that meet the standard requirements;

2.2.4. When selling a substance, it is obligatory to provide the buyer with information on the toxicity and safety of the substance;

2.2.5. the substance shall be packaged in a container with a specific label for retail sale;

2.2.6. the substance shall be transported by a special purpose vehicle with a warning sign and the seller shall be responsible for the safety during transportation, loading and unloading;

2.2.7. When concluding a contract with a carrier, to present and sign the Mongolian version of the toxin, safety reference information, safety instructions, contingency plan, and transportation route;

2.2.8. Obliged to comply with international treaties and agreements and to create conditions to prevent accidents and risks that may occur during transportation, loading and unloading, and to take measures to reduce harm and danger in the event of accidents and losses;

2.3. Requirements for the use of ozone depleting substances and other substitutes:

2.3.1. When citizens, economic entities and organizations use ozone depleting substances and other substitutes, in addition to those specified in 3.7 and 3.8 of this regulation, in accordance with Article 6.1.2 of the Law on Toxic and Hazardous Chemicals, “Storage of toxic and hazardous chemicals , transportation, use and disposal procedures ”;

2.3.2. Business entities and organizations engaged in the repair and maintenance of refrigeration and ventilation using ozone-depleting substances and other substitutes shall not intentionally release ozone-depleting substances into the air;

2.3.3. to provide the consumer (client) with a document in Mongolian describing the name of the substance contained in the refrigeration and ventilation equipment, the amount used for maintenance, and the capacity of the product;

2.4. Requirements for sale and use of ozone depleting substances and other substitutes and equipment containing them:

2.4.1. Provide “Customer Guide” in Mongolian language accompanying the equipment being sold;

2.4.2. Business entities and organizations operating using equipment and technologies containing ozone depleting substances and other substitutes for industrial purposes shall have a risk assessment specified in Article 17 of the Law on Toxic and Hazardous Chemicals.

Three. Issuance and revocation of licenses for import, sale and use of ozone depleting substances and other substitutes and equipment containing them

3.1. The state central administrative body in charge of nature and environment (hereinafter referred to as the “Central Authority”) shall approve the number and amount of imports of ozone depleting substances and other substitutes, products and equipment containing them within December of each year.

3.2. The central organization shall approve the form of the license certificate for import, sale and use of ozone depleting substances and other substitutes, products and equipment containing them.

3.3. Based on the import quantity approved by the central organization for the given year, a license to import, sell and use shall be issued to a citizen, business entity or organization that meets the requirements specified in Articles 3.7, 3.8 and 2 of this regulation.

3.4. The central organization shall review the request submitted by the citizen, business entity or organization within 21 working days and make a decision or respond to it.

3.5. Permits for the import, sale and use of ozone depleting substances and other substitutes, products and equipment containing them shall be valid for that year.

3.6. No more than two household appliances (refrigerators and freezers) containing imported substitutes for personal use may be allowed to cross the state border once without a permit.

3.7. Citizens, business entities and organizations wishing to issue permits for import, sale and use of ozone depleting substances and other substitutes shall include or attach the following indicators and documents in their applications;

3.7.1. to apply for a permit by a citizen, business entity or organization in writing;

3.7.2. international names and chemical formulas for ozone depleting substances and other substitutes;

3.7.3. international registration number (CAS number);

3.7.4. Laboratory of labor safety, hygiene, toxic and hazardous chemicals and warning signs provided by the manufacturer or official dealer, chemical hazard information reference sheet (MSDS) that meets the requirements of MNS 5029: 2011 standard;

3.7.5. agreement with the supplier on import of ozone depleting substances and other substitutes (original translation certified if translated from Mongolian or foreign language);

3.7.6. Name of the border crossing point of Mongolia;

3.7.7. Copy of state registration certificate for business entity and organization, ID card for citizen;

3.8. Citizens, business entities and organizations requesting permission to import, sell and use products and equipment containing ozone depleting substances and other substitutes shall submit the following documents:

3.8.1. Citizens, business entities and organizations requesting permission to import, sell and use equipment, in addition to the materials specified in 3.7.1, 3.7.6 and 3.7.7 of this Article, a document indicating the type, place of use, purpose and quantity of the equipment;

3.8.2. a reference from the manufacturer or authorized distributor, indicating the brand name of the refrigeration and ventilation equipment for commercial and industrial purposes, the name and quantity of the substances contained in them, and the capacity of the product;

3.8.3. Manufacturer's or authorized dealer's description of the name, amount, and capacity of substances contained in industrial equipment for the production of thermal insulation foamed polystyrene sheets (HRS) and other foamed hard and soft polyurethane (PUR), thermal insulation pipes, and prepolymer materials ;

3.9. Licenses of citizens, business entities and organizations licensed to import, sell and use ozone depleting substances and other substitutes and equipment containing them shall be revoked in accordance with the Law on Business Entities.

3.10. This regulation shall not apply to ozone-depleting substances, equipment and goods included in the coded list of goods prohibited to cross the Mongolian border in Chapter 1 of Annex 2 and Chapter 1 of Annex 4 to this Regulation.

Four. Prohibition activities

4.1. The following activities are prohibited when importing, selling or using ozone depleting substances and other substitutes and equipment containing them:

4.1.1. to smuggle ozone depleting substances and substitutes and equipment containing them across the state border without permission;

4.1.2. Introduce and import various production lines, products and technologies to be used in hydrochlorofluorocarbons (HCFC) specified in Annex 2 to this regulation from January 2020;

4.1.3. Re-export of ozone depleting substances and substitutes and equipment containing them to countries not party to the Montreal Protocol.

Tav. Monitoring

5.1. Control over the import of ozone depleting substances and other substitutes and equipment containing them shall be exercised by customs and specialized inspection agencies.

5.2. The state central administrative body in charge of nature and environment shall approve the number and amount of imports of ozone depleting substances and other substitutes and equipment containing them specified in 3.1 of this regulation for each business entity and submit them to the customs and specialized inspection agency by January of each year. .

5.3. Customs shall submit statistical reports and data on imports of ozone depleting substances and other substitutes and equipment containing them in a given year to the state central administrative body in charge of nature and environment by January 15 of the following year.

5.4. Local control over the sale, transportation and use of ozone-depleting substances and other substitutes and equipment containing them shall be exercised by a specialized inspection agency and a state environmental inspector.

5.5. The State Specialized Inspection Agency shall submit to the state central administrative body in charge of nature and environment information on violations revealed during scheduled and unscheduled inspections of business entities and organizations licensed to sell, transport and use ozone depleting substances and other substitutes and equipment containing them. submit.

Six. Responsibilities

6.1. If it is established that the import of ozone-depleting substances and equipment containing them is prohibited or restricted for crossing the state border, citizens, business entities and organizations shall be fully responsible for all costs of repatriation to the exporting country.

Government Resolution No. 277 of 2018
Annex 3 to the resolution

LIST OF OZONE DEPOSITING SUBSTANCES

D / d	Type of substance	International standard marking of substances	Chemical names and formulas	Mongolian chemical names	International registration number (CAS number)	Ability to influence global warming	Harmonized product identification and coding system / BTCUS / code	Common forms of use
CHAPTER I. HYDROFORTOUS CARBONS (GFN / HFC)								
1	Hydroftor carbon	HFC-134	1,1,2,2-Tetrafluoroethane , (CHF_2CHF_2)	R-134	359-35-3	1100	2903.39.90	Coolant / Foaming agent
2	Hydroftor carbon	HFC-134a	1,1,1,2-Tetrafluoroethane, (CH_2FCF_3)	Tetrafluoroethane	811-97-2	1430	2903.39.90	Coolant / Propellant
3	Hydroftor carbon	HFC-143	1,1,2-Trifluoroethane , (CH_2FCHF_2)	R-143	430-66-0	353	2903.39.90	Coolant (Unknown)
4	Hydroftor carbon	HFC-143a	1,1,1- Trifluoroethane, (CH_3CF_3)	Triftoretan	420-46-2	4470	2903.39.90	Coolant (Unknown)
5	Hydroftor carbon	HFC-245fa	1,1,1,3,3-Pentafluoropropane, ($CHF_2CH_2CF_3$) ($C_3H_3F_5$)	R-245fa	460-73-1	1030	2903.39.90	Foaming agent
6	Hydroftor carbon	HFC-365mfc	1,1,1,3,3-Pentafluorobutane , ($CF_3CH_2CF_2CH_3$)	R-365mfc	406-58-6	794	2903.39.90	Foaming agent
7	Hydroftor carbon	HFC-227ea	1,1,1,2,3,3,3-Heptafluoropropane (C_3HF_7)	R-227ea	431-89-0	3220	2903.39.90	Foaming foam / Fire extinguisher
8	Hydroftor carbon	HFC-236cb	1,1-Dichloro-2,2,3-Trifluoropropane , ($CH_2FCF_2CF_3$)	R-236cb	70192-70-0	1340	2903.39.90	Coolant (Unknown)
9	Hydroftor carbon	HFC-236ea	1,1,1,2,3,3-Hexafluoropropane, (CHF_2CHFCF_3) ($C_3H_2F_6$)	R-236ea	431-63-0	1370	2903.39.90	Coolant (Unknown)
10	Hydroftor carbon	HFC-236fa	1,1,1,3,3,3-Hexafluoropropane, ($CF_3CH_2CF_3$) ($C_3H_2F_6$)	R-236fa	690-39-1	9810	2903.39.90	When the fire is extinguished

11	Hydroftor carbon	HFC-245ca	1,1,2,2,3-Pentafluoropropane , ($CH_2FCF_2CHF_2$)	R-245ca	679-86-7	693	2903.39.90	Coolant (Unknown)
12	Hydroftor carbon	HFC-43-10mee	1,1,1,2,2,3,4,5,5,5-Decaflouropentane, ($CF_3CHFCHFCF_2CF_3$)	R-43-10mee	193487-54-6	1640	2903.39.90	Solvent
13	Hydroftor carbon	HFC-32	Difluoromethane, (CH_2F_2)	Methane diphtheria	75-10-5	675	2903.39.90	Refrigerant
14	Hydroftor carbon	HFC-125	Pentafluoroethane, (CHF_2CF_3)	Pentaphthorethane	354-33-6	3500	2903.39.90	Coolant / Fire Extinguisher
15	Hydroftor carbon	HFC-41	Fluoromethane, (CH_3F)	R-41	593-53-3	92	2903.39.90	Coolant (Unknown)
16	Hydroftor carbon	HFC-152	1,2-Difluoroethane , (CH_2FCH_2F)	R-152	624-72-6	53	2903.39.90	Coolant (Unknown)
17	Hydroftor carbon	HFC-152a	1,1-Difluoroethane, (CH_3CHF_2)	Diphtheria	75-37-6	124	2903.39.90	Foaming agent / Propellant
18	Hydroftor carbon	HFC-23	Trifluoromethane, (CHF_3)	Triftor methane	75-46-7	14800	2903.39.90	Refrigerant
19	Carbon in saturated hydrofluoride	R-161	Fluoroethane, (CH_3CH_2F) (C_2H_5F)	Fluorine ethane	353-36-6	12	2903.39.90	Coolant (Unknown)
20	Unsaturated hydrofluorine carbon	R-1234yf	2,3,3,3-Tetrafluoropropene, ($C_3H_2F_4$) $CF_3CF=CH_2$	2,3,3,3-Tetraft propene	754-12-1	4	2903.39.90	Refrigerant
21	Unsaturated hydrofluorine carbon	R-1234ze	1,3,3,3-Tetrafluoropropene, ($C_3H_2F_4$) $CF_3CH=CHF$	1,3,3,3-Tetraftropropene	1645-83-6	7	2903.39.90	Coolant / Foaming agent
SECTION II. SATISFACTORY HYDROFORTOUS CARBON (GFN / HFC) MIXTURE								
22	Hydroftor carbon mixture	R-404A	R125 / 143a / 134a (44.0 / 52.0 / 4.0) 44 ± 2% C_2HF_5	R-404A	354-33-6 / 420-46-2 / 811-97-2	3922	3824.78.00	Refrigerant

			52 ± 1% $C_2H_3F_3$ 4 ± 2% $C_2H_2F_4$					
23	Hydroftor carbon mixture	R-407A	R32 / 125 / 134a (20.0 / 40.0 / 40.0) 20 ± 2% CH_2F_2 40 ± 2% C_2HF_5 40 ± 2% $C_2H_2F_4$	R-407A	75-10-5 / 354-33-6 / 811-97-2	2107	3824.78.00	Refrigerant
24	Hydroftor carbon mixture	R-407B	R32 / 125 / 134a (10.0 / 70.0 / 20.0) 10 ± 2% CH_2F_2 70 ± 2% C_2HF_5 20 ± 2% $C_2H_2F_4$	R-407B	75-10-5 / 354-33-6 / 811-97-2	2804	3824.78.00	Refrigerant
25	Hydroftor carbon mixture	R-407C	R32 / 125 / 134a (23.0 / 25.0 / 52.0) 23 ± 2% CH_2F_2 25 ± 2% C_2HF_5 52 ± 2% $C_2H_2F_4$	R-407C	75-10-5 / 354-33-6 / 811-97-2	1774	3824.78.00	Refrigerant
26	Hydroftor carbon mixture	R-407D	R-32/125 / 134a (15.0 / 15.0 / 70.0) 15 ± 2% CH_2F_2 15 ± 2% C_2HF_5 70 ± 2% $C_2H_2F_4$	R-407D	75-10-5 / 354-33-6 / 811-97-2	1627	3824.78.00	Refrigerant
27	Hydroftor carbon mixture	R-407E	R32 / 125 / 134a (15.0 / 15.0 / 70.0) 25 ± 2% CH_2F_2 15 ± 2% C_2HF_5 60 ± 2% $C_2H_2F_4$	R-407E	75-10-5 / 354-33-6 / 811-97-2	1552	3824.78.00	Refrigerant
28	Hydroftor carbon mixture	R-407F	R-32/125 / 134a (30 ± 2/30 ± 2/40 ± 2) 30 ± 2% CH_2F_2	R-407F	75-10-5 / 354-33-6 / 811-97-2	1824	3824.78.00	Refrigerant

			30 ± 2% C_2HF_5 40 ± 2% $C_2H_2F_4$					
29	Hydroftor carbon mixture	R-407G	R-32/125 / 134a (2.5 / 2.5 / 95.0)	R-407G	75-10-5 / 354-33-6 / 811-97-2	1466	3824.78.00	Refrigerant
30	Hydroftor carbon mixture	R-407H	R-32/125 / 134a (32.5 / 15.0 / 52.5)	R-407H	75-10-5 / 354-33-6 / 811-97-2	1534	3824.78.00	Refrigerant
31	Hydroftor carbon mixture	R-410A	R32 / 125 (50.0 / 50.0) 50 + 0.5, –1.5% CH_2F_2 50 + 1.5, –.5% C_2HF_5	R-410A	75-10-5 / 354-33-6	2088	3824.78.00	Refrigerant
32	Hydroftor carbon mixture	R-410B	R32 / 125 (45.0 / 55.0) 45 ± 1% CH_2F_2 55 ± 1% C_2HF_5	R-410B	75-10-5 / 354-33-6	2229	3824.78.00	Refrigerant
33	Hydroftor carbon mixture	R-413A	R218 / 134a / 600a (9.0 / 88.0 / 3.0) (9 ± 1/88 ± 2/3 + 0, –1) 9 ± 1% C_3F_8 88 ± 2% $C_2H_2F_4$ 3 + 0, –1% C_4H_{10}	R-413A	76-19-7 / 811-97-2 / 75-28-5	2053	3824.78.00	Refrigerant
34	Hydroftor carbon mixture	R-417A	R125 / 134a / 600 (46.6 / 50.0 / 3.4) (46.6 ± 1.1 / 50 ± 1 / 3.4 + .1, –.4) 46.6 ± 1.1% C_2HF_5 50 ± 1% $C_2H_2F_4$ 3.4 + 0.1, –.4% C_4H_{10}	R-417A	354-33-6 / 811-972 / 106-97-8	2346	3824.78.00	Refrigerant
35	Hydroftor carbon	R-417A	R125 / 134a / 600	R-417A	354-33-6 /	2346	3824.78.00	Refrigerant

	mixture		(46.6 / 50.0 / 3.4) (46.6 ± 1.1 / 50 ± 1 / 3.4 + .1, –.4) 46.6 ± 1.1% C_2HF_5 50 ± 1% $C_2H_2F_4$ 3.4 + 0.1, –.4% C_4H_{10}		811-972 / 106-97-8			
36	Hydroftor carbon mixture	R-417B	R-125 / 134a / 600 (79 ± 1 / 18.3 ± 1 / 2.7 + .1, –.5) 79 ± 1% C_2HF_5 18.3 ± 1% $C_2H_2F_4$ 2.7 + .1, -. 5% C_4H_{10}	R-417B	354-33-6 / 811-972 / 106-97-8	3027	3824.78.00	Refrigerant
37	Hydroftor carbon mixture	R-417C	R-125 / 134a / 600 (19.5 / 78.8 / 1.7)	R-417C	354-33-6 / 811-972 / 106-97-8	1809	3824.78.00	Refrigerant
38	Hydroftor carbon mixture	R-419A	R125 / 134a / E170 (77.0 / 19.0 / 4.0) 77 ± 1% C_2HF_5 19 ± 1% $C_2H_2F_4$ 4 ± 1% C_2H_6O	R-419A A mixture of pentafluoride ethane, tetraftor ethane and dimethyl ether	354-33-6 / 811-97-2 / 115-10-6	2967	3824.78.00	Refrigerant
39	Hydroftor carbon mixture	R-419B	R125 / 134a / E170 (48.5 / 48.0 / 3.5)	R-419B	354-33-6 / 811-97-2 / 115-10-6	2384	3824.78.00	Refrigerant
40	Hydroftor carbon mixture	R-421A	R125 / 134a (58.0 / 42.0) 58 ± 1% C_2HF_5 42 ± 1% $C_2H_2F_4$	R-421A	351-33-6 / 811-97-2	2631	3824.78.00	Refrigerant
41	Hydroftor carbon mixture	R-421B	R125 / 134a (85.0 / 15.0) 85 ± 1% C_2HF_5 15 ± 1% $C_2H_2F_4$	R-421B	351-33-6 / 811-97-2	3190	3824.78.00	Refrigerant

42	Hydroftor carbon mixture	R-422A	R125 / 134a / 600a (85.1 / 11.5 / 3.4) 85.1 ± 1% C_2HF_5 11.5 ± 1% $C_2H_2F_4$ 3.4 + 0.1, -. 4% C_4H_{10}	R-422A	351-33-6 / 811-97-2 / 75-28-5	3143	3824.78.00	Refrigerant
43	Hydroftor carbon mixture	R-422B	R125 / 134a / 600a (55.0 / 42.0 / 3.0) 55 ± 1% C_2HF_5 42 ± 1% $C_2H_2F_4$ 3 + 0.1, -. 5% C_4H_{10}	R-422B	351-33-6 / 811-97-2 / 75-28-5	2526	3824.78.00	Refrigerant
44	Hydroftor carbon mixture	R-422C	R125 / 134a / 600a (82.0 / 15.0 / 3.0) 82 ± 1% C_2HF_5 15 ± 1% $C_2H_2F_4$ 3 + 0.1, -. 5% C_4H_{10}	R-422C	351-33-6 / 811-97-2 / 75-28-5	3085	3824.78.00	Refrigerant
45	Hydroftor carbon mixture	R-422D	R125 / 134a / 600a (65.1 / 31.5 / 3.4) 65.1 + 0.9, –1.1% C_2HF_5 31.5 ± 1% $C_2H_2F_4$ 3.4 + 0.1, -. 4% C_4H_{10}	R-422D	351-33-6 / 811-97-2 / 75-28-5	2729	3824.78.00	Refrigerant
46	Hydroftor carbon mixture	R-422E	R125 / 134a / 600a (58.0 / 39.3 / 2.7)	R-422E	351-33-6 / 811-97-2 / 75-28-5	2592	3824.78.00	Refrigerant
47	Hydroftor carbon mixture	R-423A	R134a / 227ea (52.5 / 47.5) 52.5 ± 1% $C_2H_2F_4$ 47.5 ± 1% C_3HF_7	R-423A	811-97-2 / 431-89-0	2280	3824.78.00	Refrigerant
48	Hydroftor carbon mixture	R-424A	R125 / 134a / 600a / 600 / 601a (50.5 / 47.0 / 0.9) 50.5 ± 1% C_2HF_5	R-424A	354-33-6 / 811-97-2 / 75-28-5 /	2440	3824.78.00	Refrigerant

			47 ± 1% $C_2H_2F_4$ 1.9 + 0.3, -. 1% C_4H_{10} 0.6 + 0.1, -. 2% C_5H_{12}		106-97-8 / 78-78-4			
49	Hydroftor carbon mixture	R-425A	R32 / 134a / 227ea (18.5 / 69.5 / 12.0) 18.5 ± .5% CH_2F_2 69.5 ± .5% $C_2H_2F_4$ 12 ± 0.5% C_3HF_7	R-425A	75-10-5 / 811-97-2 / 431-89-0	1505	3824.78.00	Refrigerant
50	Hydroftor carbon mixture	R-426A	R125 / 134a / 600 / 601a (5.1 / 93.0 / 1.3 / 0.6) 5.1 ± 1% C_2HF_5 93 ± 1% $C_2H_2F_4$ 1.3 + 0.1, -. 2% C_4H_{10} 0.6 + 0.1, -. 2% C_5H_{12}	R-426A	354-33-6 / 811-97-2 / 106-97-8 / 78-78-4	1508	3824.78.00	Refrigerant
51	Hydroftor carbon mixture	R-427A	R31 / 125 / 143a / 134a (15.0 / 25.0 / 10.0 / 50.0) 15 ± 2% CH_2F_2 25 ± 2% C_2HF_5 10 ± 2% $C_2H_3F_3$ 50 ± 2% $C_2H_2F_4$	R-427A	593-70-4 / 354-33-6 / 420-46-2 / 811-97-2	2138	3824.78.00	Refrigerant
52	Hydroftor carbon mixture	R-428A	R32 / 143a / 290 / 600a (77.5 / 20.0 / 0.6 / 1.9) 77.5 ± 1% C_2HF_5 20 ± 1% $C_2H_3F_3$ 0.6 + 0.1, –0.2% C_3H_8 1.9 + 0.1, –0.2% C_4H_{10}	R-428A	75-10-5 / 420-46-2 / 74-98-6	3607	3824.78.00	Refrigerant
53	Hydroftor carbon mixture	R-429A	R-E170 / 152a / 600a (77.5 / 20.0 / 0.6 / 1.9) 60 ± 1% C_2H_6O 10 ± 1% $C_2H_4F_2$ 30 ± 1% C_4H_{10}	R-429A	115-10-6 / 75-37-6 / 75-28-5	14	3824.78.00	Refrigerant

54	Hydroftor carbon mixture	R-430A	R152a / 600a (76.0 / 24.0) 76 ± 1% $C_2H_4F_2$ 24 ± 1% C_4H_{10}	R-430A	75-37-6 / 75-28-5	95	3824.78.00	Refrigerant
55	Hydroftor is a mixture of carbon and hydrocarbons	R-431A	R-290 / 152a (71.0 / 29.0) 71 ± 1% C_3H_8 29 ± 1% $C_2H_4F_2$	R-431A	74-98-6 / 75-37-6	38	3824.78.00	Refrigerant
56	Hydroftor is a mixture of carbon and hydrocarbons	R-434A	R125 / 143a / 134a / 600a (63.2 / 18.0 / 16.3 / 2.8) 63.2 ± 1% C_2HF_5 · 18 ± 1% $C_2H_3F_3$ 16 ± 1% $C_2H_2F_4$ 2.8 + 0.1, –0.2% C_4H_{10}	R-434A	354-33-6 / 420-46-2 / 811-97-2 / 75-28-5	3245	3824.78.00	Refrigerant
57	Carbon and ether in hydrofluoride	R-435A	R-E170 / 152a (80.0 / 20.0) 80 ± 1% C_2H_6O 20 ± 1% $C_2H_4F_2$	R-435A	115-10-6 / 75-37-6	26	3824.78.00	Refrigerant
58	Hydroftor is a mixture of carbon and hydrocarbons	R-437A	R-125 / 134a / 600/601 (19.5 + 0.5, –1.8 / 78.5 + 1.5, –0.7 / 1.4 + 0.1, –0.2 / 0.6 + 0.1, –0.2) 19.5 + 0.5, –1.8% C_2HF_5 78.5 + 1.5, -. 7% $C_2H_2F_4$ 1.4 + 0.1, –0.2% C_4H_{10} 0.6 + 0.1, –0.2% C_5H_{12}	R-437A	354-33-6 / 811-97-2 / 106-97-8 / 109-66-0	1805	3824.78.00	Refrigerant
59	Hydroftor is a mixture of carbon and hydrocarbons	R-438A	R-32/125 / 134a / 600 / 601a (8.5 / 45.0 / 44.2 / 1.7 / 0.6)	R-438A	75-10-5 / 354-33-6 / 811-97-2 /	2265	3824.78.00	Refrigerant

					106-97-8 / 109-66-0			
60	Hydroftor carbon mixture	R-439A	R-32/125 / 600a (50 ± 1/47 ± 1/3 ± .5) 50 ± 1% CH_2F_2 47 ± 1% C_2HF_5 3 ± .5% C_4H_{10}	R-439A	75-10-5 / 354-33-6 / 75-28-5	1983	3824.78.00	Refrigerant
61	Hydroftor carbon mixture	R-440A	R-290 / 134a / 152a (0.6 ± .1 / 1.6 ± .6 / 97.8 ± 0.5) 0.6 ± .1% C_3H_8 1.6 ± .6% $C_2H_2F_4$ 97.8 ± .5% $C_2H_4F_2$	R-440A	74-98-6 / 811-97-2 / 75-37-6	144	3824.78.00	Refrigerant
62	Hydroftor carbon mixture	R-442A	R-32/125 / 134a / 152a / 227ea (31.0 / 31.0 / 30.0 / 3.0 / 5.0)	R-442A	74-98-6 / 811-97-2 / 75-37-6	144	3824.78.00	Refrigerant
63	Hydroftor carbon mixture	R-444A	R-32 / 152a / 1234ze (E) (12.0 / 5.0 / 83.0)	R-444A	75-10-5 / 75-37-6 / 1645-83-6	93	3824.78.00	Refrigerant
64	Hydroftor carbon mixture	R-444B	R-32 / 1234ze (E) / 152a (41.5 / 48.5 / 10.0)	R-444B	75-10-5 / 1645-83-6 / 75-37-6	296	3824.78.00	Refrigerant
65	Hydroftor carbon mixture	R-445A	R-744 / 134a / 1234ze (E) (6.0 / 9.0 / 85.0)	R-445A	124-38-9 / 811-97-2 / 1645-83-6	135	3824.78.00	Refrigerant
66	Hydroftor carbon mixture	R-446A	R-32 / 1234ze (E) / 600 (68.0 / 29.0 / 3.0)	R-446A	75-10-5 / 1645-83-6 / 106-97-8	461	3824.78.00	Refrigerant
67	Hydroftor carbon mixture	R-447A	R-32/125 / 1234ze (E) (68.0 / 3.5 / 28.5)	R-447A	75-10-5 / 354-33-6 / 1645-83-6	583	3824.78.00	Refrigerant

68	Hydroftor carbon mixture	R-447B	R-32/125 / 1234ze (E) (68.0 / 8.0 / 24.0)	R-447B	75-10-5 / 354-33-6 / 1645-83-6	741	3824.78.00	Refrigerant
69	Hydroftor carbon mixture	R-448A	R-32/125 / 1234yf / 134a / 1234ze (E) (26/26/20/21/7)	R-448A	75-10-5 / 354-33-6 / 754-12-1 / 811-97-2 / 1645-83-6	1387	3824.78.00	Refrigerant
70	Hydroftor carbon mixture	R-449A	R-32/125 / 1234yf / 134a / (24.3 / 24.7 / 25.3 / 25.7)	R-449A	75-10-5 / 354-33-6 / 754-12-1 / 811-97-2	1410	3824.78.00	Refrigerant
71	Hydroftor carbon mixture	R-449B	R-32/125 / 1234yf / 134a (25.2 / 24.3 / 23.2 / 27.3)	R-449B	75-10-5 / 354-33-6 / 754-12-1 / 811-97-2	1412	3824.78.00	Refrigerant
72	Hydroftor carbon mixture	R-449C	R-32/125 / 1234yf / 134a (20.0 / 20.0 / 31.0 / 29.0)	R-449C	75-10-5 / 354-33-6 / 754-12-1 / 811-97-2	1251	3824.78.00	Refrigerant
73	Hydroftor carbon mixture	R-450A	R-1234ze (E) / 134a (58/42)	R-450A	1645-83-6 / 811-97-2	605	3824.78.00	Refrigerant
74	Hydroftor carbon mixture	R-451A	R-1234yf / 134a (89.8 / 10.2)	R-451A	754-12-1 / 811-97-2	149	3824.78.00	Refrigerant
75	Hydroftor carbon mixture	R-451B	R-1234yf / 134a (88.8 / 11.2)	R-451B	754-12-1 / 811-97-2	164	3824.78.00	Refrigerant
76	Hydroftor carbon mixture	R-452A	R-1234yf / 32/125 (30/11/59)	R-452A	754-12-1 / 75-10-5 /	2140	3824.78.00	Refrigerant

					354-33-6			
77	Hydroftor carbon mixture	R-452B	R-32/125 / 1234yf (67.0 / 7.0 / 26.0)	R-452B	75-10-5 / 354-33-6 / 754-12-1	698	3824.78.00	Refrigerant
78	Hydroftor carbon mixture	R-452C	R-32/125 / 1234yf (12.5 / 61.0 / 26.5)	R-452C	75-10-5 / 354-33-6 / 754-12-1	2220	3824.78.00	Refrigerant
79	Hydroftor carbon mixture	R-453A	R-32/125 / 134a / 227ea / 600 / 601a (20.0 / 20.0 / 53.8 / 5.0 / 0.6 / 0.6)	R-453A	75-10-5 / 354-33-6 / 811-97-2 / 431-89-0 / 106-97-8 / 78-78-4	1765	3824.78.00	Refrigerant
80	Hydroftor carbon mixture	R-454A	R-32 / 1234yf (35.0 / 65.0)	R-454A	75-10-5 / 754-12-1	239	3824.78.00	Refrigerant
81	Hydroftor carbon mixture	R-454B	R-32 / 1234yf (68.9 / 31.1)	R-454B	75-10-5 / 754-12-1	466	3824.78.00	Refrigerant
82	Hydroftor carbon mixture	R-454C	R-32 / 1234yf (21.5 / 78.5)	R-454C	75-10-5 / 754-12-1	148	3824.78.00	Refrigerant
83	Hydroftor carbon mixture	R-455A	R-744/32 / 1234yf (3.0 / 21.5 / 75.5)	R-455A	124-38-9 / 75-10-5 / 754-12-1	148	3824.78.00	Refrigerant
84	Hydroftor carbon mixture	R-456A	R-32 / 134a / 1234ze (E) (6.0 / 45.0 / 49.0)	R-456A	75-10-5 / 811-97-2 / 1645-83-6	687	3824.78.00	Refrigerant
85	Hydroftor carbon mixture	R-457A	R-32 / 1234yf / 152a (18.0 / 70.0 / 12.0)	R-457A	75-10-5 / 754-12-1 / 75-37-6	139	3824.78.00	Refrigerant
86	Hydroftor carbon mixture	R-458A	R-32/125 / 1234a / 227ea / 236fa	R-458A	75-10-5 / 354-33-6 /	1650	3824.78.00	Refrigerant

			(20.5 / 4.0 / 51.4 / 13.5 / 0.6)		811-97-2 / 431-89-0 / 690-39-1			
87	Hydroftor carbon mixture	R-459A	R-32 / 1234yf / 1234ze (E) (68.0 / 26.0 / 6.0)	R-459A	75-10-5 / 754-12-1 / 1645-83-6	460	3824.78.00	Refrigerant
88	Hydroftor carbon mixture	R-459B	R-32 / 1234yf / 1234ze (E) (21.0 / 69.0 / 10.0)	R-459B	75-10-5 / 754-12-1 / 1645-83-6	145	3824.78.00	Refrigerant
89	Hydroftor carbon mixture	R-460A	R-32/125 / 134a / 1234ze (E) (12.0 / 52.0 / 14.0 / 22.0)	R-460A	75-10-5 / 354-33-6 / 811-97-2 / 1645-83-6	2103	3824.78.00	Refrigerant
90	Hydroftor carbon mixture	R-460B	R-32/125 / 134a / 1234ze (E) (28.0 / 25.0 / 20.0 / 27.0)	R-460B	75-10-5 / 354-33-6 / 811-97-2 / 1645-83-6	1352	3824.78.00	Refrigerant
91	Hydroftor carbon mixture	R-461A	R-125 / 143a / 134a / 227ea / 600a (55/5/32/5/3)	R-461A	354-33-6 / 420-46-2 / 811-97-2 / 431-89-0 / 75-28-5	2767	3824.78.00	Refrigerant
92	Hydroftor carbon mixture	R-462A	R-32/125 / 143a / 134a / 600 (9.0 / 42.0 / 2.0 / 44.0 / 3.0)	R-462A	75-10-5 / 354-33-6 / 420-46-2 / 811-97-2 / 106-97-8	2249	3824.78.00	Refrigerant
93	Hydroftor carbon mixture	R-507A	R-125 / 143a (50.0 / 50.0) 50% C_2HF_5	R-507A	354-33-6 / 420-46-2	4985	3824.78.00	Refrigerant

			50% $C_2H_3F_3$					
94	Hydroftor is a mixture of carbon and hydrocarbons	R-508A	R-23/116 (39.0 / 61.0) 39% CHF_3 61% C_2F_6	R-508A	75-46-7 / 76-16-4	13214	3824.78.00	Refrigerant
95	Hydroftor carbon mixture	R-508B	R-23/116 (46.0 / 54.0) 46% CHF_3 54% C_2F_6	R-508B	75-46-7 / 76-16-4	13396	3824.78.00	Refrigerant
96	Hydroftor carbon mixture	R-511A	R-290 / E170 (95 ± 1/5 ± 1) 95 ± 1% C_3H_8 5 ± 1% C_2H_6O	R-511A	74-98-6 / 75-37-6	9	3824.78.00	Refrigerant
97	Hydroftor carbon mixture	R-513A	R-1234yf / 134a (56/44)	R-513A	754-12-1 / 811-97-2	631	3824.78.00	Refrigerant
98	Hydroftor carbon mixture	R-513B	R-1234yf / 134a (58.5 / 41.5)	R-513B	754-12-1 / 811-97-2	596	3824.78.00	Refrigerant
99	Hydroftor carbon mixture	R-514A	R-1336mzz (Z) / 1130 (E) (74.7 / 25.3)	R-513A	692-49-9 / 156-59-2	7	3824.78.00	Refrigerant
100	Hydroftor carbon mixture	R-515A	R-1234ze (E) / 227ea (88.0 / 12.0)	R-515A	1645-83-6 / 431-89-0	393	3824.78.00	Coolant (Unknown)
101	Hydroftor carbon mixture	R-516A	R-1234yf / 134a / 152a (77.5 / 8.5 / 14.0)	R-516A	754-12-1 / 811-97-2 / 75-37-6	142	3824.78.00	Refrigerant
SECTION III. NATURAL REFRIGERATORS - NON-ORGANIC COMPOUNDS								
102	Natural	R-702	Normal Hydrogen, (H_2)	Hydrogen	1333-74-0	0	2804.10.00	Refrigerant (Unknown)
103	Natural	R-704	Helium, (He)	Helium	7440-59-7	0	2804.29.00	Refrigerant (Unknown)

104	Natural	R-717	Ammonia, (NH_3)	Ammonia	7664-41-7	0	2814.10.00	Refrigerant (Unknown)
105	Natural	R-718	Water / Steam, (H_2O)	Water and water vapor	7732-18-5	0	2853.90.00	Refrigerant (Unknown)
106	Natural	R-729	Air, N_2 / O_2 / Ar (78.082 / 20.945 / 0.934 vol%)	Air, N_2 / O_2 / Ar 78% N_2, 21% O_2, 1% Ar	132259-10	-	2853.90.00	Refrigerant (Unknown)
107	Natural	R-744	Carbon dioxide, (CO_2)	Carbon dioxide	124-38-9	1.0	2811.21.00	Refrigerant (Unknown)
108	Natural	R-764	SO_2	Sulfur dioxide	7446-09-5	300	2811.29.00	Refrigerant (Unknown)
109	Natural	R-1270	Propylene (C_3H_7)	Propylene	115-07-1	2	2901.22.00 *	Refrigerant
SECTION IV. CARBONS (Technical safety rules will be followed)								
110	Hydrocarbons	HC-290	Propane, (C_3H_8) ($CH_3CH_2CH_3$)	Propane	74-98-6	3	2711.12.00	Refrigerant
111	Hydrocarbons	R-E170	Dimethyl ether, (CH_3OCH_3)	Dimethyl ether	115-10-6	1	2909.19.00	Foaming agent
112	Hydrocarbons	HC-170	Ethane (CH_3CH_3)	Ethan	74-84-0	6	2901.10.00	Refrigerant (Unknown)
113	Hydrocarbons	HC-600	Butane (C_4H_{10}) ($CH_3CH_2CH_2CH_3$)	Bhutan	106-97-8	4	2901.10.00	Refrigerant
114	Hydrocarbons	HC-600a	Isobutane, (C_4H_{10}) ($CH(CH_3)_2CH_3$)	Isobutane R – 600a, i – Bhutan, 2 – Methylpropane Isobutane	75-28-5	3	2901.10.00	Refrigerant
115	Hydrocarbons	HC-601	Pentane, (C_5H_{12}) ($CH_3CH_2CH_2CH_2CH_3$)	Pentane	109-66-0	5	2901.10.00	Refrigerant (Unknown)
116	Hydrocarbons	HC-601a	Isopentane, (C_5H_{12})	Isopentane	78-78-4	-	2901.10.00	Foaming agent

			$(CH_3)_2CHCH_2CH_3$)					
117	Hydrocarbons	R-611	Methyl formate, ($HCOOCH_3$)	Methylformate (Methyl formic acid ester)	107-31-3	12 ± 3	2915.13.00	Foaming agent
CHAPTER V. CARBONS AND ETERIES MIXTURE (Technical safety rules will be followed)								
118	A mixture of hydrocarbons and ethers	R-432A	$CH_3CH=CH$ R-1270 / E170 (80 ± 1/20 ± 1) 80 ± 1% C_3H_6 20 ± 1% C_2H_6O	A mixture of dimethyl ether and propylene	115-07-1 / 115-10-6	2	3824.99.00	Refrigerant
119	A mixture of hydrocarbons and ethers	R-433A	CH_3CH_3 R-1270/290 (30 ± 1/70 ± 1) 30 ± 1% C_3H_6 70 ± 1% C_3H_8	Propylene, propane mixture	115-07-1 / 74-98-6	3	3824.99.00	Refrigerant
120	A mixture of hydrocarbons and ethers	R-433B	CH_3CH_3 R-1270/290 (5.0 / 95.0)	Propylene, propane mixture	115-07-1 / 74-98-6	3	3824.99.00	Refrigerant
121	A mixture of hydrocarbons and ethers	R-433C	CH_3CH_3 R-1270/290 (25.0 / 75.0)	Propylene, propane mixture	115-07-1 / 74-98-6	3	3824.99.00	Refrigerant
122	Hydrocarbon mixture	R-436A	$CH_3CH_2CH_3$ R-290 / 600a (56 ± 1/44 ± 1) 56 ± 1% C_3H_8 44 ± 1% C_4H_{10}	Propane, isobutane mixture	74-98-6 / 75-28-5	3	3824.99.00	Refrigerant
123	Hydrocarbon mixture	R-436B	$CH_3CH_2CH_2CH_2$ R-290 / 600a (52 ± 1/48 ± 1)	Propane, isobutane mixture	74-98-6 / 75-28-5	3	3824.99.00	Refrigerant

			52 ± 1% C_3H_8 48 ± 1% C_4H_{10}					
124	Hydrocarbon mixture	R-441A	$CH_3CH_2CH_3$ R-170/290 / 600a / 600 (3.1 / 54.8 / 6.0 / 36.1)	R-441A	74-84-0 / 74-98-6 / 75-28-5 / 106-97-8	3	3824.99.00	Refrigerant
125	Hydrocarbon mixture	R-443A	$CH_3CH_2CH_3$ R-1270/290 / 600a (55.0 / 40.0 / 5.0)	R-443A	115-07-1 / 74-98-6 / 75-28-5 /	2	3824.99.00	Refrigerant
126	Hydrocarbon mixture	R-510A	$CH(CH_3)CH_3$ R-E170 / 600a (88 ± .5 / 188 ± .5% C_2H_6O 12 ± .5% C_4H_{10} 2 ± .5)	A mixture of dimethyl ether and isobutane	115-10-6 / 75-28-5	20	3824.99.00	Refrigerant
127	Hydrocarbon mixture	R-1150	Ethylene (C_2H_4)	Ethylene	74-85-1	20	2711.14 **	Refrigerant (Unknown)

Note: * If the propylene has a purity of more than 90 percent, the BTCUS code is 2901.22.00

** If the propylene has a purity of less than 90 percent, the BTCUS code is 2711.14.00

Ethylene (unsaturated hydrocarbon) has a purity of less than 95%, while the BTCUS code is 2711.14.00

Ethylene (unsaturated hydrocarbons) with a purity of more than 95%, BTCUS code 2901.21.00

Government Resolution No. 277 of 2018
Annex 2 to the resolution

LIST OF OZONE DECORATIVE SUBSTANCES

D / d	Type of substance	International standard marking of substances	Chemical names and formulas	Mongolian chemical names	International registration number (CAS number)	Ozone depletion	Code of the Harmonized Commodity Coding System (HCMS)	Common forms of use
CHAPTER I. CODED LIST OF GOODS PROHIBITED FROM BORDERING MONGOLIA (Government Resolution No. 54 of 2001)								
1.	Carbon fluoride	CFC-11	($CFCl_3$) Trichlorofluoromethane	Trichlorofluoromethane	75-69-4	1.0	2903.77.11	Refrigerant / Solvent / Chemical Additives / Raw Materials / Foaming agents /

								Propellant
2.	Carbon fluoride	CFC-12	(CCl_2F_2) Dichlorodifluoromethane	Dichlordiftormethane	75-71-8	1.0	2903.77.12	Refrigerant / Chemical Additives / Raw Materials
3.	Carbon fluoride	CFC-113	($C_2F_3Cl_3$) 1,1,2-Trichlorotrifluoroethane	Trichlortriftoretan	76-13-1	0.8	2903.77.23	Solvent / Chemical Additives / Raw Materials
4.	Carbon fluoride	CFC-114	($C_2F_4Cl_2$) Dichlorotetrafluoroethane	Dichloroetrafluoroethane	76-14-2	1.0	2903.77.24	Refrigerant / Raw materials
5.	Carbon fluoride	CFC-115	(C_2ClF_5) Monochloropentafluoroethane	Chlorpentaphthorethane	76-15-3	0.6	2903.77.25	Refrigerant
6.	Carbon fluoride	Halon 1211	(CF_2ClBr) Bromochlorodifluoromethane	Bromochlordiftormethane	353-59-3	3.0	2903.76.10	Raw materials / Firefighting
7.	Carbon fluoride	Halon 1301	(CF_3Br) Bromotrifluoromethane	Bromotryftormethane	75-63-8	10.0	2903.76.20	Raw materials / Firefighting
8.	Carbon fluoride	Halon 2402	($C_2F_4Br_2$) Dibromotetrafluoroethane	Dibrometetrafluoroethane	124-73-2	6.0	2903.76.30	Coolant / Fire Extinguisher
9.	Carbon fluoride	CFC-13	(CF_3Cl) Chlorotrifluoromethane	Chlortriftormethane	75-72-9	1.0	2903.77.13	Coolant / Propellant
10.	Carbon fluoride	CFC-111	(C_2Cl_5F) Pentachlorofluoroethane	Pentachlorofluoroethane	354-56-3	1.0	2903.77.21	Refrigerant
11.	Carbon fluoride	CFC-112	($C_2Cl_4F_2$) Tetrachlorodifluoroethane	Tetrachlorofluoroethane	76-12-0	1.0	2903.77.22	Refrigerant
12.	Carbon fluoride	CFC-211	(C_3FCl_7) Heptachlorofluoropropane	Heptachlorofluoropropane	422-78-6	1.0	2903.77.31	Refrigerant (Unknown)
13.	Carbon fluoride	CFC-212	($C_3F_2Cl_6$) Hexachlorodifluoropropane	Hexachlorodiftorpropane	76546-99-3	1.0	2903.77.32	Refrigerant (Unknown)

14.	Carbon fluoride	CFC-213	($C_3F_3Cl_5$) Pentachlorotrifluoropropane	Pentahlortriftorpropane	2354-06-5	1.0	2903.77.33	Refrigerant (Unknown)
15.	Carbon fluoride	CFC-214	($C_3F_4Cl_4$) Tetrachlorotetrafluoropropane	Tetrachlortetraft propane	2268-46-4	1.0	2903.77.34	Refrigerant (Unknown)
16.	Carbon fluoride	CFC-215	($C_3F_5Cl_3$) Trichloropentafluoropropane	Trichloropentaftorpropane	4259-43-2	1.0	2903.77.35	Refrigerant (Unknown)
17.	Carbon fluoride	CFC-216	($C_3F_6Cl_2$) Dichlorohexafluoropropane	Dichlorhexaphthoropropane	661-97-2	1.0	2903.77.36	Refrigerant (Unknown)
18.	Carbon fluoride	CFC-217	(C_3F_7Cl) Chloroheptafluoropropane	Chlorheptaftorpropane	422-86-6	1.0	2903.77.37	Refrigerant (Unknown)
19.	Carbon fluoride	R-140a	Methyl Chloroform ($C_2H_3Cl_3$) 1,1,1-trichloroethane (111-TCA) 3	Methylchloroform	71-55-6	0.1	2903.19.10	Solvent / Raw material / For cleaning technical parts
20.	Carbon in hydrochlorofluoride	HCFC-21	($CHFCl_2$) Dichlorofluoromethane	Dichlorofluoromethane	75-43-4	0.04	2903.79.10	Raw materials
21.	Carbon in hydrochlorofluoride	HCFC-31	(CH_2FCl) Monochlorofluoromethane	Chlorofluoromethane	593-70-4	0.02	2903.79.20	Refrigerant / Raw materials
22.	Carbon in hydrochlorofluoride	HCFC-121	(C_2HFCl_4) Tetrachlorofluoroethane	Tetrachlorofluoroethane	354-14-3	0.04	2903.79.90	Refrigerant (Unknown)
23.	Carbon in hydrochlorofluoride	HCFC-122	($C_2HF_2Cl_3$) Trichlorodifluoroethane	Trichlorodiphthorethane	354-21-2	0.08	2903.79.90	Refrigerant (Unknown)
24.	Carbon in hydrochlorofluoride	HCFC-124	(C_2HF_4Cl) Monochlorotetrafluoroethane	2-chlorine-1,1,1,2-tetrafluoroethane	2837-89-0	0.04	2903.79.30	Coolant / Raw materials / Fire extinguishing
25.	Carbon in hydrochlorofluoride	HCFC-131	($C_2H_2FCl_3$) Trichlorofluoroethane	Trichlorofluoroethane	359-28-4	0.05	2903.79.90	Refrigerant (Unknown)
26.	Carbon in	HCFC-132	($C_2H_2F_2Cl_2$)	Dichlorodiphthorethane	25915-78-0	0.05	2903.79.90	Refrigerant

	hydrochlorofluoride		Dichlorideluoroethane					(Unknown)
27.	Carbon in hydrochlorofluoride	HCFC - 133	($C_2H_2F_3Cl$) Chlorotrifluoroethane	Chlortriftoretan	431-07-2	0.06	2903.79.90	Refrigerant (Unknown)
28.	Carbon in hydrochlorofluoride	HCFC - 141	($C_2H_3FCl_2$) Dichlorofluoroethane	Dichlorofluoroethane	430-57-9	0.07	2903.73.00	Refrigerant (Unknown)
29.	Carbon in hydrochlorofluoride	HCFC-141b	(CH_3FCl_2) Dichlorofluoroethane	Dichlorofluoroethane	1717-00-6	0.11	2903.73.00	Refrigerant / Solvent / Raw material / Foaming agent
30.	Carbon in hydrochlorofluoride	HCFC - 151	(C_2H_4FCl) Chlorofluoroethane	Chlorofluoroethane	110587-14-9	0.005	2903.79.90	Refrigerant (Unknown)
31.	Carbon in hydrochlorofluoride	HCFC-221	(C_3HFCl_6) Hexachlorofluoropropane	Hexachlorofluoropropane	422-26-4	0.07	2903.79.90	Refrigerant (Unknown)
32.	Carbon in hydrochlorofluoride	HCFC-222	($C_3HF_2Cl_5$) Pentachlorodifluoropropane	Pentachlordiftorpropane	422-49-1	0.09	2903.79.90	Refrigerant (Unknown)
33.	Carbon in hydrochlorofluoride	HCFC-223	($C_3HF_3Cl_4$) Tetrachlorotrifluoropropane	Tetrachlorothriftorpropane	422-52-6	0.08	2903.79.90	Refrigerant (Unknown)
34.	Carbon in hydrochlorofluoride	HCFC-224	($C_3HF_4Cl_3$) Trichlorotetrafluoropropane	Trichloroetraftropropane	422-54-8	0.09	2903.79.90	Refrigerant (Unknown)
35.	Carbon in hydrochlorofluoride	HCFC-225	($C_3HF_5Cl_2$) Dichloropentafluoropropane	Dichloropentaftorpropane	127564-92-5	0.07	2903.75.00	For cleaning solvents / technical parts
36.	Carbon in hydrochlorofluoride	HCFC-225ca	($C_3HF_5Cl_2$) Dichloropentafluoropropane ($CF_3CF_2CHCl_2$)	3,3-dichloro1,1,1,2,2-pentafluorpropane	422-56-0	0.025	2903.75.00	Refrigerant (Unknown)
37.	Carbon in hydrochlorofluoride	HCFC-225cb	($C_3HF_5Cl_2$) Dichloropentafluoropropane (CF_2ClCF_2CHClF)	1,3-dichlor1,1,2,2,3-pentafluorpropane	507-55-1	0.033	2903.75.00	Refrigerant (Unknown)
38.	Carbon in hydrochlorofluoride	HCFC-226	(C_3HF_6Cl) Monochlorohexafluoropropane	Chlorhexafluoropropane	431-87-8	0.10	2903.79.90	Refrigerant (Unknown)

39.	Carbon in hydrochlorofluoride	HCFC-231	($C_3H_2FCl_5$) Pentachlorofluoropropane	Pentachlorofluoropropane	421-94-3	0.09	2903.79.90	Refrigerant (Unknown)
40.	Carbon in hydrochlorofluoride	HCFC-232	($C_3H_2F_2Cl_4$) Tetrachlorodifluoropropane	Tetrachlorodiftorpropane	460-89-9	0.10	2903.79.90	Refrigerant (Unknown)
41.	Carbon in hydrochlorofluoride	HCFC-233	($C_3H_2F_3Cl_3$) Trichlorotrifluoropropane	Trichlortriftorpropane	7125-84-0	0.23	2903.79.90	Refrigerant (Unknown)
42.	Carbon in hydrochlorofluoride	HCFC-234	($C_3H_2F_4Cl_2$) Dichlorotetrafluoropropane	Dichloroetraftropropane	425-94-5	0.28	2903.79.90	Refrigerant (Unknown)
43.	Carbon in hydrochlorofluoride	HCFC-235	($C_3H_2F_5Cl$) Monochloropentafluoropropane	Chlorpentaftorpropane	460-92-4	0.52	2903.79.90	Refrigerant (Unknown)
44.	Carbon in hydrochlorofluoride	HCFC-241	($C_3H_3FCl_4$) Tetrachlorofluoropropane	Tetrachloropropane	666-27-3	0.09	2903.79.90	Refrigerant (Unknown)
45.	Carbon in hydrochlorofluoride	HCFC-242	($C_3H_3F_2Cl_3$) Trichlorodifluoropropane	Trichlordiftorpropane	460-63-9	0.13	2903.79.90	Refrigerant (Unknown)
46.	Carbon in hydrochlorofluoride	HCFC-243	($C_3H_3F_3Cl_2$) Dichlorotrifluoropropane	Dichlortriftorpropane	460-69-5	0.12	2903.79.90	Refrigerant (Unknown)
47.	Carbon in hydrochlorofluoride	HCFC-244	($C_3H_3F_4Cl$) Monochlorotetrafluoropropane	Chlortetrafluoropropane	679-85-6	0.14	2903.79.90	Refrigerant (Unknown)
48.	Carbon in hydrochlorofluoride	HCFC-251	($C_3H_4FCl_3$) Monochlorotetrafluoropropane	Trichlorfluorpropane	421-41-0	0.01	2903.79.90	Refrigerant (Unknown)
49.	Carbon in hydrochlorofluoride	HCFC-252	($C_3H_4F_2Cl_2$) Dichlorodifluoropropane	Dichlorodiftorpropane	819-00-1	0.04	2903.79.90	Refrigerant (Unknown)
50.	Carbon in hydrochlorofluoride	HCFC-253	($C_3H_4F_3Cl$) Monochlorotrifluoropropane	Chlortriftorpropane	460-35-5	0.03	2903.79.90	Refrigerant (Unknown)
51.	Carbon in hydrochlorofluoride	HCFC-261	($C_3H_5FCl_2$) Dichlorofluoropropane	Dichloroftorpropane	420-97-3	0.02	2903.79.90	Refrigerant (Unknown)
52.	Carbon in hydrochlorofluoride	HCFC-262	($C_3H_5F_2Cl$) Monochlorodifluoropropane	Chlordiftorpropane	421-02-03	0.02	2903.79.90	Refrigerant (Unknown)
53.	Carbon in	HCFC-271	(C_3H_6FCl)	Chlorfluorpropane	430-55-7	0.03	2903.79.90	Refrigerant

	hydrochlorofluoride		Monochlorofluoropropane					(Unknown)
SECTION II. LIST OF TOXIC AND HAZARDOUS CHEMICALS RESTRICTED IN MONGOLIA (Government Resolution No. 95 of 2007)								
54.	Carbon fluoride	CTC	Carbon tetrachloride CCl_4 (CTC)	Four hydrocarbons	56-23-5	1.1	2903.14.00	Solvent / Chemical Additives / Raw Materials
SECTION III. LIST OF OTHER OZONE-DETERMINING SUBSTANCES								
55.	Carbon in hydrochlorofluoride	HCFC-22	Monochlorodifluoromethane (CHF_2Cl)	Chlordiftormethane	75-45-6	0.055	2903.71.00	Coolant / Solvent / Raw Material / Propellant
56.	Carbon in hydrochlorofluoride	HCFC-123	Dichlorotrifluoroethane, ($C_2HF_3Cl_2$)	2,2-dichloro-1,1,1-triphthoretane	306-83-2	0.06	2903.72.00	Coolant / Solvent / Raw materials / Fire extinguishing
57.	Carbon in hydrochlorofluoride	HCFC-123a	1,2-Dichloro-1,1,2-trifluoroethane, ($CHCl_2CF_3$)	1,2-dichloro-1,1,2 triphthoretane	354-23-4	0.02	2903.72.00	Refrigerant (Unknown)
58.	Carbon in hydrochlorofluoride	HCFC-124a	1-Chloro-1,1,2,2-tetrafluoroethane , ($CHFClCF_3$)	2-chlorine-1,1,2,2-tetrafluoroethane	354-25-6	0.022	2903.79.30	Refrigerant (Unknown)
59.	Carbon in hydrochlorofluoride	HCFC - 142	Chlorodifluoroethane, ($C_2H_3F_2Cl$)	Chlorodiphthorethane	25497-29-4	0.07	2903.74.00	Refrigerant (Unknown)
60.	Carbon in hydrochlorofluoride	HCFC-142b	Monochlorodifluoroethane, ($C_2H_3F_2Cl$)	1-chlorine-1,1-diphthorethane	75-68-3	0.065	2903.74.00	Refrigerant / Raw material / Foaming agent
SECTION IV								
61.	Carbon mixture in hydrochlorofluoride	R-402A	R-125/290/22 (60 ± 2/2 ± 1/38 ± 2) 60 ± 2% C_2HF_5	R-402A	354-33-6 / 74-98-6 / 75-45-6	0.0209	3824.74.00	Refrigerant

			2 ± 1% C_3H_8 38 ± 2% $CHClF_2$					
62.	Carbon mixture in hydrochlorofluoride	R-402B	R-125/290/22 (38 ± 2/2 ± 1/60 ± 2) 38 ± 2% C_2HF_5 2 ± 1% C_3H_8 60 ± 2% $CHClF_2$	R-402B	354-33-6 / 74-98-6 / 75-45-6	0.033	3824.74.00	Refrigerant
63.	Carbon mixture in hydrochlorofluoride	R-403A	R-290/22/218 (5 + .2, -2 / 75 ± 2/20 ± 0) 5 + 0.2, -2% C_3H_8 75 ± 2% $CHClF_2$ 20 ± 0% C_3F_8	R-403A	74-98-6 / 75-45-6 / 76-19-7	0.04125	3824.74.00	Refrigerant
64.	Carbon mixture in hydrochlorofluoride	R-403B	R-290/22/218 (5 + 0.2, -2 / 56 ± 2/39 ± 0) 5 + 0.2, -2% C_3H_8 56 ± 2% $CHClF_2$ 39 ± 0% C_3F_8	R-403B	74-98-6 / 75-45-6 / 76-19-7	0.0308	3824.74.00	Refrigerant
65.	Carbon mixture in hydrochlorofluoride	R-406A	R-22 / 600a / 142b (55 ± 2/4 ± 1/41 ± 0) 55 ± 2% $CHClF_2$ 4 ± 1% C_4H_{10} 41 ± 0% $C_2H_3F_2Cl$	R-406A	75-45-6 / 75-28-5 / 75-68-3	0.0569	3824.74.00	Refrigerant
66.	Carbon mixture in hydrochlorofluoride	R-408A	R-125 / 143a / 22 (7 ± 2/46 ± 1/47 ± 2) 7 ± 2% C_2HF_5 46 ± 1% $C_2H_3F_3$ 47 ± 2% $CHClF_2$	R-408A	354-33-6 / 420-46-2 / 75-45-6	0.02585	3824.74.00	Refrigerant
67.	Carbon mixture in hydrochlorofluoride	R-411A	R-1270/22 / 152a (1.5 + 0, –1 / 87.5 + 2, –0 / 11 + 0, –1)	R-411A	115-07-1 / 75-45-6 / 75-37-6	0.048125	3824.74.00	Refrigerant

			1.5 + 0, –1% C_3H_6 · 87.5 + 2, –0% $CHClF_2$ · 11 + 0, –1% $C_2H_4F_2$					
68.	Carbon mixture in hydrochlorofluoride	R-411B	R-1270/22 / 152a (3 + 0, –1 / 94 + 2, –0 / 3 + 0, –1) 3 + 0, –1% C_3H_6 94 + 2, –0% $CHClF_2$ 3 + 0, –1% $C_2H_4F_2$	R-411B	115-07-1 / 75-45-6 / 75-37-6	0.0517	3824.74.00	Refrigerant
69.	Carbon mixture in hydrochlorofluoride	R-412A	R-22/218 / 142b (70 ± 2/5 ± 2/25 ± 1) 70 ± 2% $CHClF_2$ 5 ± 2% C_3F_8 25 ± 1% $C_2H_3F_2Cl$	R-412A	75-45-6 / 76-19-7 / 75-68-3	0.0385	3824.74.00	Refrigerant
70.	Carbon mixture in hydrochlorofluoride	R-414A	R-22/124 / 600a / 142b (51 ± 2 / 28.5 ± 2/4 ± .5 / 16.5 + .5, –1) 51 ± 2% $CHClF_2$ 28.5 ± 2% C_2HF_4Cl 4 ± .5% C_4H_{10} 16.5 + .5, –1% $C_2H_3F_2Cl$	R-414A	75-45-6 / 2837-89-0 / 75-28-5 / 75-68-3	0.045045	3824.74.00	Refrigerant
71.	Carbon mixture in hydrochlorofluoride	R-414B	R-22/124 / 600a / 142b (50 ± 2/39 ± 2 / 1.5 ± .5 / 9.5 + .5, –1) 50 ± 2% $CHClF_2$ 39 ± 2% C_2HF_4Cl 1.5 ± .5% C_4H_{10} 9.5 + .5, –1% $C_2H_3F_2Cl$	R-414B	75-45-6 / 2837-89-0 / 75-28-5 / 75-68-3	0.042255	3824.74.00	Refrigerant
72.	Carbon mixture in hydrochlorofluoride	R-415A	R-22 / 152a (82 ± 1/18 ± 1) 82 ± 1% $CHClF_2$ 18 ± 1% $C_2H_4F_2$	R-415A	75-45-6 / 75-37-6	0.0451	3824.74.00	Refrigerant

73.	Carbon mixture in hydrochlorofluoride	R-415B	R-22 / 152a (25 ± 1/75 ± 1) 25 ± 1% $CHClF_2$ 75 ± 1% $C_2H_4F_2$	R-415B	75-45-6 / 75-37-6	0.01375	3824.74.00	Refrigerant
74.	Carbon mixture in hydrochlorofluoride	R-418A	R-290/22 / 152a (1.5 ± .5 / 96 ± 1 / 2.5 ± .5) 1.5 ± .5% C_3H_8 · 96 ± 1% $CHClF_2$ · 2.5 ± .5% $C_2H_4F_2$	R-418A	74-98-6 / 75-45-6 / 75-37-6	0.0528	3824.74.00	Refrigerant
75.	Carbon mixture in hydrochlorofluoride	R-420A	R-134a / 142b (88 + 1, –0 / 12 + 0, –1) 88 + 1, –0% $C_2H_2F_4$ 12 + 0, –1% $C_2H_3F_2Cl$	R-420A	811-97-2 / 75-68-3	0.0078	3824.74.00	Refrigerant
76.	Carbon mixture in hydrochlorofluoride	R-509A	R-22/218 (44/56) 44% $CHClF_2$ 56% C_3F_8	R-509A	75-45-6 / 76-19-7	0.0242	3824.74.00	Refrigerant