ORDER
OF THE PRESIDENT OF THE RUSSIAN FEDERATION
NO. 621-RP OF DECEMBER 7, 1994
ON THE CONTROL OVER THE EXPORT FROM THE RUSSIAN FEDERATION OF CHEMICALS, EQUIPMENT AND TECHNOLOGIES WHICH HAVE PEACEFUL DESIGNATION BUT MAY BE USED IN THE CREATION OF CHEMICAL WEAPONS
(with the Amendments and Additions of August 28, 2001)

This Order shall be abolished as of the moment of coming into force of Decree of the President of the Russian Federation No. 1082 of August 28, 2001

1. To approve the List submitted by the Government of the Russian Federation of chemicals, equipment and technologies which have peaceful designation but may be used in the creation of chemical weapons, whose export is controlled and effected by licenses (attached).

2. The Government of the Russian Federation shall approve the Regulations on the procedure for the control over the export from the Russian Federation of chemicals, equipment and technologies which have peaceful designation but may be used in the creation of chemical weapons.

The Regulation on the Control over the Export from the Russian Federation of Chemicals, Equipment and Technologies, Which Have Peaceful Designation but May Be Used in the Creation of Chemical Weapons was approved by the Decision of the Government of the Russian Federation No. 50 of January 16, 1995

3. To establish that the codes of the commodity classification of foreign economic activity, mentioned in the List attached to the present Order, where necessary, may be specified by the State Customs Committee of Russia in agreement with the Russian Agency for Export Control.

4. To invalidate the Order of the President of the Russian Federation No. 508-rp of September 16, 1992.

5. The present Order shall be effective as of the moment of its signing.

President of the Russian Federation — Boris Yeltsin

Moscow, the Kremlin

List
of Chemicals, Equipment and Technologies of Peaceful Destination Which Can Be Used in Production of Chemical Weapons, Export of Which Is Controlled and Carried out under Licences
(Endorsed by the Order of the President of the Russian Federation No. 621-rp of December 7, 1994)

Item No.	Description	Code of CC FEA
	Section I. Chemicals	
I.1.	Compounds with one P-methyl, P-ethyl, or P-propyl (normal or iso-) bond	293100100; 293100200; 293100300; 293100900
I.2.	N,N-diisopropylaminoethyl-2-chloride	292119900

I.3.	N,N-diisopropylaminoethylmercaptan-2	293090800
I.4.	N,N-diisopropylaminoethane-2-ol	292219000
I.5.	Diethyl-N,N-dimethylamidophosphate	292119900
I.6.	Pinacolin alcohol	290519900
I.7.	3-hydroxi-1-methylpiperidine	293339900
I.8.	Quinuclidine-3-ol	293339900
I.9.	Thiodiglycol	292090800
I.10.	Arsenic trichloride	281210900
I.11.	Cyanogen chloride	285100900
I.12.	Carbonic acid dichloranhydride (phosgene)	281210900
I.13.	Trichlorenitromethane (chloropicrin)	290490900
I.14.	Dimethyl phosphite	292090200
I.15.	Trimethyl phosphite	292090300
I.16.	Diethyl phosphite	292090800
I.17.	Triethyl phosphite	292090800
I.18.	Phosphorus trichloride	281210150
I.19.	Phosphorus pentachloride	281210190
I.20.	Phosphorus oxichloride	281210110
I.21.	Hydrogene fluoride	281111000
I.22.	Salts of hydrogene fluoride	282611000; 282619000
I.23.	Phenylacetic (benzilic) acid	291633000
I.24.	3-quinuclidone	293339900
I.25.	Dimethylamine	292111110; 292111190
I.26.	Thionylchloride	281210900
I.27.	Methylbenzylate	291819900
I.28.	2-chloroethanol	290550100
I.29.	Pinacolin	291419000

I.30.	Potassium cyanide	283719000
I.31.	Sulphur monochloride	281210900
I.32.	Sulphur dichloride	281210900
I.33.	Dimethylamine hydrochloride	292111900
I.34.	Sodium cyanide	283711000
I.35.	Triethanolamine	292213000
I.36.	Phosphore pentasulphide	281390100
I.37.	Diisopropylamine	292119900
I.38.	Diethylaminoethanol	292219000
I.39.	Sodium sulphide	283010000
I.40.	Triethanolamine hydrochloride	292213000
I.41.	N,N-diisopropyl-2-aminoethylchloride hydrochloride	292119900

Section II. Equipment

II.1. Production installations and equipment

II.1.1. Reaction vessels, reactors, and mixers

II.1.1.1.	Reaction vessels or reactors with mixers or without them with the total inner capacity of 0.1 m3 (100 l) and less than 20 m3 (2,000 l), which have all agent-contacting surfaces made of one or several corrosion resistant materials listed below: Nickel or alloys containing more than 40% of nickel by weight; Alloys with more than 20% content of nickel and 20% of chromium by weight; Tantalum or tantalum alloys; Titanium or titanium alloys; Zirconium or zirconium alloys; Fluoro-polymers; Glass or glass lining (including glass-like or enamel coating); Silver or silver-plated materials	731010000; 841940000; 847982000
II.1.1.2.	Mixers specially designed (intended) for use in reaction vessels or reactors indicated in Item II.1.1.1, which have all agent-contacting surfaces made of one or several of corrosion resistant	847982000; 847990920; 847990980

	materials listed below: Nickel or alloys with more than 40% content of nickel by weight; Alloys with more than 25% content of nickel and 20% content of chromium by weight; Tantalum or tantalum alloys; Titanium or titanium alloys; Zirconium or zirconium alloys; Fluoro-polymers; Glass or glass lining (including glass-like or enamel coating); Silver or silver-plated materials	
II.1.2.	Storage capacities, containers or accumulators with the total inner volume of more than 0.1 m3 (100 l), which have all agent-contacting surfaces made of one or several of corrosion-resistant materials listed below: Nickel or alloys with more than 40% content of nickel by weight; Alloys with more than 25% content of nickel and 20% content of chromium by weight; Tantalum or tantalum alloys; Titanium or titanium alloys; Zirconium or zirconium alloys; Fluoro-polymers; Glass or glass lining (including glass-like or enamel coating); Silver or silver-plated materials	730900300; 731010000; 731100; 860900900
II.1.3.	Heat exchangers or condensers with the area of heat-transfer surface of less than 20 m2, which have all agent-contacting surfaces made of one or several of corrosion-resistant materials indicated below: Nickel or alloys with more than 40% content of nickel by weight; Alloys with more than 25% content of nickel and 20% content of chromium by weight; Tantalum or tantalum alloys; Titanium or titanium alloys; Zirconium or zirconium alloys; Fluoro-polymers; Glass or glass lining (including glass-like or enamel coating); Graphite; Silver or silver-plated materials	841950900
II.1.4.	Distillation or absorption columns with the inner diameter of more than 0.1 m, which have all agent-contacting surfaces	841940000

	made of one or more of corrosion-resistant materials: Nickel or alloys with more than 40% content of nickel by weight; Alloys with more than 25% content of nickel and 20% content of chromium by weight; Tantalum or tantalum alloys; Titanium or titanium alloys; Zirconium or zirconium alloys; Fluoro-polymers; Glass or glass lining (including glass-like or enamel coating); Graphite; Silver or silver-plated materials	
II.1.5.	Remote-control filling (dispensing) equipment which have all agent-contacting surfaces made of one or several of corrosion-resistant materials indicated below: Nickel or alloys with more than 40% content of nickel by weight; Alloys with more than 25% content of nickel and 20% content of chromium by weight;	842230000
II.1.6.	Multiple-packing valves with a leakage-monitoring hole, bellows-packing valves, reverse (locking) membrane-type valves which have all agent-contacting surfaces made of one or several corrosion-resistant materials indicated below: Nickel or alloys with more than 40% content of nickel by weight; Alloys with more than 25% content of nickel and 20% content of chromium by weight; Tantalum or tantalum alloys; Titanium or titanium alloys; Zirconium or zirconium alloys; Fluoro-polymers; Glass or glass lining (including glass-like or enamel coating);	848180790; 848180870; 848180990
II.1.7.	Multipurpose lines (double- and multiple-wall tubes) of the "tube-in-tube" type with a leakage-monitoring hole, which have all agent-contacting surfaces made of one or several of corrosion-resistant materials indicated below: Nickel or alloys with more than 40% content of nickel by weight; Alloys with more than 25% content of nickel and 20% content of chromium by weight;	841990900

	Tantalum or tantalum alloys; Titanium or titanium alloys; Zirconium or zirconium alloys; Fluoro-polymers; Glass or glass lining (including glass-like or enamel coating); Graphite; Silver or silver-plated materials	
II.1.8.	Leakage-free, multiple-packing pumps with magnetic drive, bellows or diaphragm type; pumps with maximum capacity of more than 0.6 m3/h or vacuum pumps with maximum capacity of 5 m3/h (at 0°C and 101.30 kPa), which have all agent-contacting surfaces made of one or several corrosion-resistant materials indicated below: Nickel or alloys with more than 40% content of nickel by weight; Alloys with more than 25% content of nickel and 20% content of chromium by weight; Tantalum or tantalum alloys; Titanium or titanium alloys; Zirconium or zirconium alloys; Fluoro-polymers; Glass or glass lining (including glass-like or enamel coating); Graphite; Ceramics; Ferrosilicon	841381900; 841410300; 841410500; 841410900
II.1.9.	Burning furnaces designed for elimination of chemical warfare agents, controlled substances or chemical armaments outfitted with specially designed waste-feeding systems and special loading and unloading devices with the average temperature in the combustion chamber of more than 1,000°C, which have all agent-contacting surfaces in the waste-feeding system made of one or several of corrosion-resistant materials indicated below or coated with them: Nickel or alloys with more than 40% content of nickel by weight; Alloys with more than 25% content of nickel and 20% content of chromium by weight; Ceramics	841780900; 851420900; 851430900
II.2.	Toxic gas control systems and sensors	

II.2.1.	Toxic gas control systems including sensors designed for continuous operation and fit for detecting chemical warfare agents, chemicals indicated in Section I of the present List or organic components containing phosphore, sulphur, fluoride or chlorine at concentrations of 0.3 mg/m3 or less	902710100; 902710900; 902790900
II.2.2.	Toxic gas control systems including sensors designed for detecting organic phosphorous compounds using preparations of the cholinesterase group	902710100; 902710900; 902790900

Notes:

1. Export control shall not apply to equipment specially designed for civilian use (for food production, cellulose processing and paper production, water purification) and unfit, as regards its design particulars, for storing, processing, manufacture, conducting a flow of chemical warfare agents or any controlled chemicals indicated in Section I of the present List.
2. Export (transfer, exchange) of any uncontrolled equipment containing one or several controlled components indicated in Section II of the present List, when a controlled component or components are a part of this equipment and can actually be removed or used for other purposes, shall be eligible for export control in compliance with procedure established for such component
3. Export (transfer, exchange) of an enterprise which can be used for production of chemical weapons or chemicals indicated in Section I of the present List shall be eligible for export control

Section III. Technologies

Definitions

1. "Technology" - concrete information necessary for development, manufacture, or use of the product. This information may have the form of "technical data" or "technical aid"

2. "Development" includes all stages of works preceding the manufacture, such as:
   Designing;
   Design surveys;
   Analysis of design options;
   Working out design concepts;

Assembly and testing of prototypes (modelling);
Patterns of pilot production;
Technical documentation;
The process of transfer of technical documentation for production

3. "Production" includes all stages of manufacture, such as:
Arranging and adjustment of production process;
Manufacture;
Configuration;
Assembly (installation);
Production control and checks;
Testing;
Quality control measures

4. "Technical aid" may have such forms as:
Instructions;
Professional development;
Personnel training;
Transfer of practical experience;
Consultation services
Technical aid may include transfer of technical data

5. "Technical data" - information in the form of projects, plans, diagrams, models, formulas, tables, technical projects (calculations) and specification, guides and instructions on various media including such as magnetic disks, tapes, and read-only memory (ROM) modules

6. "Use" includes operation, installation (including on-site mounting), technical service and maintenance (checks), repair, overhauls or recovery

III.1. Production technologies of chemical agents

III.1.1. Production technology of compounds containing one P-methyl, P-ethyl, or P-propyl (normal or iso-) bond:

III.1.1.1. Dimethylmethylphosphonate

III.1.1.2. Methylphosphonildifluoride (methylphosphonic acid difluoroanhydride);

III.1.1.3. Methylphosphonildichloride (methylphosphonic acid dichloranhydride);

III.1.1.4. Diethylethylphosphonate;

III.1.1.5. Ethyldichlorphosphine

III.1.1.6. Ethylphosphonildichloride (ethylphosphonic acid dichloranhydride;

III.1.1.7. Ethylphosphonildichloride (ethylphosphonic acid

difluoroanhydride);

III.1.1.8. Methyldichlorphosphine;

III.1.1.9. O-ethyl-2-diisopropylaminoethylmethylphosphonite;

III.1.1.10. Diethylmethylphosphonite;

III.1.1.11. Dimethylmethylphosphonate;

III.1.1.12. Ethyldifluorophosphine;

III.1.1.13. Methyldifluorophosphine;

III.1.1.14. Phosphacrylate;

III.1.1.15. Phosdiol-A;

III.1.1.16. Estefan-383

III.1.1.17. Hexaran

III.1.1.18. Phospolyol II

III.1.1.19. Phostetrol I

III.1.2. Production technology of N,N-diisopropylaminoethyl-2-chloride

III.1.3. Production technology of N,N-diisopropylaminoethylmercaptan-2

III.1.4. Production technology of N,N-diisopropylaminoethane-2-ol

III.1.5. Production technology of diethyl-N,N-dimethylamidophosphate

III.1.6. Production technology of pinacolin alcohol

III.1.7. Production technology of 3-hydroxi-1-methylpiperidine

III.1.8. Production technology of quinuclidine-3-ol

III.1.9. Production technology of thiodiglycol

III.1.10. Production technology of cyanogen chloride

III.1.11. Production technology of arsenic trichloride

III.1.12. Production technology of dimethyl phosphite

III.1.13. Production technology of trimethyl phosphite

III.1.14. Production technology of diethyl phosphite

III.1.15. Production technology of triethyl phosphite

III.1.16. Production technology of phosphorus trichloride

III.1.17. Production technology of phosphorus pentachloride

III.1.18. Production technology of phosphorus oxichloride

III.1.19. Production technology of hydrogene fluoride

III.1.20. Production technology of salts of hydrogene fluoride:

III.1.21.1. Potassium bifluoride;

III.1.21.2. Ammonium bifluoride;

III.1.21.3. Sodium bifluoride;

III.1.21.4. Sodium fluoride;

III.1.21.5. Potassium fluoride

III.1.22. Production technology of phenylacetic (benzilic) acid

III.1.23. Production technology of 3-quinuclidone

III.1.24. Production technology of dimethylamine

III.1.25. Production technology of thionyl chloride

III.1.26. Production technology of methyl benzylate

III.1.27. Production technology of 2-chloroethanol

III.1.28. Production technology of pinacolin

III.1.29. Production technology of potassium cyanide

III.1.30. Production technology of sulphur monochloride

III.1.31. Production technology of sulphur dichloride

III.1.32. Production technology of dimethylamine hydrochloride

III.1.33. Production technology of sodium cyanide

III.1.34. Production technology of triethanolamine

III.1.35. Production technology of phosphore pentasulphide

III.1.36. Production technology of diisopropylamine

III.1.37. Production technology of diethylaminoethanol

III.1.38. Production technology of sodium sulphide

III.1.39. Production technology of triethanolamine hydrochloride

III.1.40. Production technology of N,N-diisopropyl-2-aminoethylchloride hydrochloride

III.2. Production technologies of equipment

III.2.1. Design and production technology of reaction vessels, reactors, and mixers

III.2.1.1. Design and production technology of reaction vessels or reactors with mixers or without them with the total inner capacity of 0.1 m3 (100 l) and less than 20 m3 (2,000 l), which have all agent-contacting surfaces made of one or several of corrosion resistant materials listed below:
Nickel or alloys containing more than 40% of nickel by weight;
Alloys with more than 20% content of nickel and 20% of chromium by weight;
Tantalum or tantalum alloys;
Titanium or titanium alloys;
Zirconium or zirconium alloys;
Fluoro-polymers;
Glass or glass lining (including glass-like or enamel coating);
Silver or silver-plated materials

III.2.1.2. Design and production technology of mixers specially designed (intended) for use in reaction vessels or reactors indicated in Item II.1.1.1, which have all agent-contacting surfaces made of one or several of corrosion resistant materials listed below:
Nickel or alloys with more than 40% content of nickel by weight;
Alloys with more than 25% content of nickel and 20% content of chromium by weight;
Tantalum or tantalum alloys;
Titanium or titanium alloys;
Zirconium or zirconium alloys;
Fluoro-polymers;
Glass or glass lining (including glass-like or enamel coating);
Silver or silver-plated materials

III.2.2. Design and production technology of storage capacities, containers or accumulators with the total inner volume of more than 0.1 m3 (100 l), which have all agent-contacting surfaces made of one or several corrosion-resistant materials:
Nickel or alloys with more than 40% content of nickel by weight;
Alloys with more than 25% content of nickel and 20% content of chromium by weight;
Tantalum or tantalum alloys;
Titanium or titanium alloys;
Zirconium or zirconium alloys;
Fluoro-polymers;
Glass or glass lining (including glass-like or enamel

coating);
Silver or silver-plated materials

III.2.3. Design and production technology of heat exchangers or condensers with the area of heat-transfer surface of less than 20 m2, which have all agent-contacting surfaces made of one or several of corrosion-resistant materials indicated below:
Nickel or alloys with more than 40% content of nickel by weight;
Alloys with more than 25% content of nickel and 20% content of chromium by weight;
Tantalum or tantalum alloys;
Titanium or titanium alloys;
Zirconium or zirconium alloys;
Fluoro-polymers;
Glass or glass lining (including glass-like or enamel coating);
Graphite;
Silver or silver-plated materials

III.2.4. Design and production technology of distillation or absorption columns with the inner diameter of more than 0.1 m, which have all agent-contacting surfaces made of one or more of corrosion-resistant materials:
Nickel or alloys with more than 40% content of nickel by weight;
Alloys with more than 25% content of nickel and 20% content of chromium by weight;
Tantalum or tantalum alloys;
Titanium or titanium alloys;
Zirconium or zirconium alloys;
Fluoro-polymers;
Glass or glass lining (including glass-like or enamel coating);
Graphite;
Silver or silver-plated materials

III.2.5. Design and production technology of remote-control filling (dispensing) equipment which have all agent-contacting surfaces made of one or several of corrosion-resistant materials indicated below:
Nickel or alloys with more than 40% content of nickel by weight;
Alloys with more than 25% content of nickel and 20% content of chromium by weight;

III.2.6. Design and production technology of multiple-packing valves with a leakage-monitoring hole, bellows-packing valves, reverse (locking) membrane-type valves, which have all agent-contacting surfaces made of one or several corrosion-resistant materials indicated below:
Nickel or alloys with more than 40% content of nickel by weight;

Alloys with more than 25% content of nickel and 20% content of chromium by weight;
Tantalum or tantalum alloys;
Titanium or titanium alloys;
Zirconium or zirconium alloys;
Fluoro-polymers;
Glass or glass lining (including glass-like or enamel coating);

III.2.7. Design and production technology of multipurpose lines (double- and multiple-wall tubes) of the "tube-in-tube" type with a leakage-monitoring hole, which have all agent-contacting surfaces made of one or several of corrosion-resistant materials indicated below:
Nickel or alloys with more than 40% content of nickel by weight;
Alloys with more than 25% content of nickel and 20% content of chromium by weight;
Tantalum or tantalum alloys;
Titanium or titanium alloys;
Zirconium or zirconium alloys;
Fluoro-polymers;
Glass or glass lining (including glass-like or enamel coating);
Graphite;
Silver or silver-plated materials

III.2.8. Design and production technology of leakage-free, multiple-packing pumps with magnetic drive, bellows or diaphragm type; pumps with maximum capacity of more than 0.6 m3/h or vacuum pumps with maximum capacity of 5 m3/h (at 0°C and 101.30 kPa) which have all agent-contacting surfaces made of one or several corrosion-resistant materials indicated below:
Nickel or alloys with more than 40% content of nickel by weight;
Alloys with more than 25% content of nickel and 20% content of chromium by weight;
Tantalum or tantalum alloys;
Titanium or titanium alloys;
Zirconium or zirconium alloys;
Fluoro-polymers;
Glass or glass lining (including glass-like or enamel coating);
Graphite;
Ceramics;
Ferrosilicon

III.2.9. Design and production technology of burning furnaces designed for elimination of chemical warfare agents, controlled substances or chemical armaments outfitted with specially designed waste-feeding systems and special loading and unloading devices with the average temperature in the combustion chamber of more than 1,000°C, which have all agent-contacting surfaces in the waste-feeding system made of

one or several of corrosion-resistant materials indicated below or coated with them:
Nickel or alloys with more than 40% content of nickel by weight;
Alloys with more than 25% content of nickel and 20% content of chromium by weight;
Ceramics

III.3. Design and production technology of toxic gas control systems and sensors

III.3.1. Design and production technology of toxic gas control systems, including sensors designed for continuous operation and fit for detecting chemical warfare agents, chemicals indicated in Section I of the present List or organic components containing phosphore, sulphur, fluoride or chlorine with concentrations of 0.3 mg/m3 or less

III.3.2. Design and production technology of toxic gas control systems, including sensors designed for detecting organic phosphorous compounds using preparations of cholinesterase group

Notes:

1. Export control shall not apply to design and production technology of equipment specially designed for civilian use (for food production, cellulose processing and paper production, water purification) and unfit, as regards its design particulars, for storing, processing, manufacturing, conducting a flow of chemical warfare agents or any controlled chemicals indicated in Section I of the present List.

2. Export (transfer, exchange) of design and production technology of any uncontrolled equipment containing one or several of controlled components indicated in Section II of the present List, when a controlled component or components are a part of this equipment and can actually be removed or used for other purposes, shall be eligible for export control in compliance with procedure established for such component

3. Export (transfer, exchange) of design and production technology of an enterprise which can be used for production of chemical weapons or chemicals indicated in Section I of the present List shall be eligible for export control

4. Endorsement (permission) to export any equipment indicated in Section II of the present List shall imply also a permission to export to the same end user the technology in the minimum amount necessary for installation, functioning, operation, or repair of this equipment.

5. Export control shall not apply to transfer of generally available information or fundamental scientific research published in open press