GROUP 7 CHEMICAL AND BIOLOGICAL WEAPONS NON-PROLIFERATION

7011. Chemical Weapon Agent Precursor Chemicals, as follows:

- 1. thiodiglycol, 111-48-8;
- 2. phosphorus oxychloride, 10025-87-3;
- dimethyl methylphosphonate, 756-79-6;
- 4. methyl phosphonyl difluoride, 676-99-3;
- 5. methyl phosphonyl dichloride, 676-97-1;
- 6. dimethyl phosphite, 868-85-9;
- 7. phosphorus trichloride, 7719-12-2;
- 8. trimethyl phosphite, 121-45-9;
- 9. thionyl chloride, 7719-09-7;
- 10. 3-hydroxy-1-methylpiperidine, 3554-74-3;
- 11. N,N-diisopropyl--aminoethyl chloride, 96-79-7;
- 12. N,N-diisopropyl--aminoethane thiol, 5842-07-9;
- 13. 3-quinuclidinol, 1619-34-7;
- 14. potassium fluoride, 7789-23-3;
- 15. 2-chloroethanol, 107-07-3;
- 16. dimethylamine, 124-40-3;
- 17. diethyl ethylphosphonate, 78-38-6;
- 18. diethyl-N,N-dimethylphos-phoramimidate, 2404-03-7;
- 19. diethyl phosphite, 762-04-9;
- 20. dimethylamine hydrochloride, 506-59-2;
- 21. ethyl phosphinyl dichloride, 1498-40-4;
- 22. ethyl phosphonyl dichloride, 1066-50-8;
- 23. ethyl phosphonyl difluoride, 753-98-0;
- 24. hydrogen fluoride, 7664-39-3;
- 25. methyl benzilate, 76-89-1;
- 26. methyl phosphinyl dichloride, 676-83-5;
- 27. N, N-diisopropyl--amino ethanol, 986-80-0;
- 28. pinacolyl alcohol, 464-07-3;
- 29. QL(o-ethyl-2- diisopropylaminoethyl methylphosphonite, 57856-11-8;
- 30. triethyl phosphite, 122-52-1;
- 31. arsenic trichloride, 7784-34-1;
- 32. benzilic acid (2,2-diphenyl-2-hydroxyacetic acid) (2,2-diphenyl glycolic acid), 76-93-7;
- 33. diethyl methylphosphonite, 15715-41-0;
- 34. dimethyl ethylphosphonate, 6163-75-3;
- 35. ethyl phosphinyl difluoride (ethyl phosphorous difluoride), 430-78-4:
- 36. methyl phosphinyl difluoride (methyl Phosphorous difluoride), 753-59-3;
- 37. 3-quinuclidone, 3731-38-2;
- 38. phosphorus pentachloride, 10026-13-8;
- 39. pinacolone (3,3-dimethyl-2-butanone), 75-97-8;
- 40. potassium cyanide, 151-50-8;
- 41. potassium hydrogen fluoride (potassium bifluoride), 7789-29-9;
- 42. ammonium hydrogen fluoride (ammonium bifluoride), 1341-49-7;
- 43. sodium bifluoride (sodium hydrogen fluoride), 7681-49-4;
- 44. sodium fluoride, 1333-83-1;
- 45. sodium cyanide, 143-33-9;
- 46. tri-ethanolamine, 102-71-6;
- 47. phosphorous pentasulphide, 1314-80-3;
- 48. di-isopropylamine, 108-18-9;
- 49. diethylaminoethanol, 100-37-8; and
- 50. sodium sulphide, 1313-82-2.
- 51. sulphur monochloride, 10025-67-9
- 52. sulphur dichloride, 10545-99-0
- 53. triethanolamine hydrochloride, 637-39-8
- 54. N,N-diisoprpyl-2-aminoethyl chloride hydrochloride, 4261-68-1

Note 1:

In Item 7011 the number following the chemical name in each paragraph is the Chemical Abstracts Service Registry Number for that chemical as listed in the Chemical Abstracts Service Registry Handbook published by the American Chemical Society, Washington, D.C..

Note 2:

Chemical mixtures containing any of the chemicals included in item

7011 are also included by item 7011, except when the chemical is merely an impurity that was not intentionally added or is a normal ingredient in consumer goods intended for retail sales.

Chemical compounds created with any chemicals listed in item 7011 are not included in item 7011 unless the compound itself is

(Item 7011 applies to all destinations except Argentina Australia, Austria, Belgium, Denmark, the Federal Republic of Germany, Finland, France, Greece, Hungary, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, the United Kingdom, and the United States.)

7012. Chemical Test, Inspection and Production Equipment, as follows:

- 1. Reaction Vessels, Storage Tanks and Receivers, Heat Exchangers and Condensers, Distillation and Absorption Columns, Valves and Multi-walled Piping, and, Pumps, as follows:
 - a. Reaction Vessels, with or without agitators, with a capacity greater than 0.1 m³ (100 l);
 - b. Storage Tanks and Receivers, with a capacity greater than 0.1 m³ (100 l);
 - Heat exchangers and Condensers;
 - d. Distillation and Absorption Columns, of diameter greater than 0.1 m;
 - Valves and multi-walled Piping, multi-seal valves incorporating a leak detection port; or
 - f. Pumps, multi-seal, canned drive, magnetic drive, bellows or diaphragm, (or vacuum pumps) with a maximum flowrate greater than 0.6 m³/h

Items listed in 7012.1.a. through f. are considered to be included in this item only if all surfaces of any of the items coming in direct contact with the chemical(s) being processed or contained are made from any of the following materials:

- 1. nickel or alloys with more than 40% nickel by weight;
- 2. alloys with more than 25% nickel and 20% chromium by weight;
- 3. fluoropolymers including PTFE, PVDF, PFA;
- 4. glass (including glass linin);
- 5. graphite;
- 6. tantalum or tantalum alloys;
- 7. titanium or titanium alloys; or
- 8. zirconium or zirconium alloys.
- 2. Remotely operated filling equipment in which all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following
 - 1. nickel or alloys with more than 40% nickel by weight;
- 2. alloys with more than 25% nickel and 20% chromium by weight.
- 3. Incinerators designed to destroy CW agents, precursors and munitions, possessing all of the following characteristics:
 - a. specially designed waste supply systems
 - b. special handling facilities
 - c. and average combustion chamber temperature greater than 1000°C.

Note:

Items listed in 7012.3.a. through c. are considered to be included in this item only if all surfaces in the waste supply system that come into direct contact with the waste products are made from or lined with any of the following materials:

- 1. nickel or alloys with more than 40% nickel by weight;
- 2. alloys with more than 25% nickel and 20% chromium by weight; or
- 3. ceramics.
- 4. Detectors
 - a. designed for continuous operation and capable of detecting CW agents, designated precursors and compounds of phosphorus, sulphur, fluorine and chlorine at concentrations of less than 0.3 mg/m³; or
 - b. capable of detecting compounds having a cholinesterase-inhibiting activity.

Note:

Item 7012 does not include equipment which is specially designed for use in civil applications such as food processing, pulp and paper processing or water purification and is, by the nature of its design,