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

- Reaction Vessels, Reactors or Agitators, Storage Tanks, Containers or Receivers, Heat Exchangers or Condensers, Distillation or Absorption Columns, Valves, Multi-walled Piping, and, Pumps, as follows:
 - Reaction Vessels or Reactors, with or without agitators, a with a total internal (geometric) volume greater than 0.1 m³ (100 l) and less than 20 m³ (20,000 l);
 - b. Agitators for use in reaction vessels or reactors listed in Item 7012.1.a..;
 - Storage Tanks, Containers or Receivers, with a total C. internal (geometric) volume greater than 0.1 m³ (100 L);
 - Heat exchangers or Condensers with a heat transfer d. surface area of less than 20 m²;
 - Distillation or Absorption Columns of internal diameter e greater than 0.1 m;
 - Multiple-seal valves incorporating a leak detection port, f. bellows-seal valves, non-return (check) valves or diaphragm valves;
 - Multi-walled Piping incorporating a leak detection port; g.
- h. Multi-seal, canned drive, magnetic drive, bellows or diaphragm pumps, with manufacturer's specified maximum flow-rate greater than 0.6 m³/h, or vacuum pumps with the manufacturer's specified maximum flow-rate greater than 5 m³/h (under standard temperature (0°C) and pressure (101.30 kPa) conditions);

Technical Note:

1.

Items listed in 7012.1.a. through h. 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;
- 4
- glass or glass-lined(including vitrified or enamelled coating); 5. graphite (applies only to heat exchangers, condensers, distillation
- and absorption columns, multi-walled piping and pumps);
- 6. tantalum or tantalum alloys;
- titanium or titanium alloys;
- 8. zirconium or zirconium alloys;
- ceramics (applies only to pumps); or 9.
- 10. ferrosilicon (applies only to pumps).
- 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 materials:
 - a. nickel or alloys with more than 40% nickel by weight; or
 - b. alloys with more than 25% nickel and 20% chromium by weight.
- Incinerators designed to destroy CW agents, AG-controlled 3. precursors or chemical munitions, possessing all of the following characteristics:
 - a. specially designed waste supply systems;
 - b. special handling facilities; and
 - c. average combustion chamber temperature greater than 1000 °C;

Technical Note:

Items listed in 7012.3.a. through 7012.3.c. are considered to be included 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.

- Toxic gas monitoring systems and dedicated detectors designed for continuous operation and useable for the a. detection of CW agents, AG-controlled precursors or organic compounds containing phosphorus, sulphur, fluorine or chlorine at concentrations of less than 0.3 mg/m^3 ; or
 - b. designed for the detection of cholinesterase-inhibiting activity.

Note:

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Governments may permit the shipment of equipment (identified in Item 7012.) 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, inappropriate for use in storing, processing, producing or conducting and controlling the flow of chemical weapon agents or any of the precursors chemicals which are included in Item 7011. or Item 2007.

(Item 7012. applies to all destinations except Argentina, Australia, Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Slovak Republic, Spain, Sweden, Switzerland, United Kingdom and United States.)

7021. **Biological Weapon Agents**

1. Human pathogens Note:

Except where the agent is in the form of a vaccine.

- a Viruses:
 - Chikungunya virus; 1
 - Congo-Crimean haemorrhagic fever virus; 2.
 - 3. Dengue fever virus;
 - 4. Eastern equine encephalitis virus:
 - 5. Ebola virus;
 - 6. Hantaan virus:
 - 7. Junin virus;
 - 8. Lassa fever virus;
 - 9. Lymphocytic choriomeningitis virus;
 - 10. Machupo virus;
 - 11. Marburg virus;
 - 12. Monkey pox virus;
 - 13. Rift Valley fever virus;
 - 14. Tick-borne encephalitis virus (Russian Spring Summer encephalitis virus);
 - 15. Variola virus:
 - 16. Venezuelan equine encephalitis virus:
 - 17. Western equine encephalitis virus;
 - 18. White pox;
 - 19. Yellow fever virus;
 - 20. Japanese encephalitis virus;
- b. Rickettsiae:
 - 1. Coxiella burnetii;
 - 2. Bartonella Qintana (Rickettsiae quintana, Rochalimea quintana);
 - 3. Rickettsiae prowazeki;
 - 4. Rickettsiae rickettsii;
- Bacteria: C.
 - 1. Bacillus anthracis;
 - 2. Brucella abortus;
 - 3. Brucella melitensis;
 - 4. Brucella suis;
 - 5. Chlamydia psittaci;
 - 6. Clostridium botulinum;
 - 7. Francisella tularensis:
 - 8. Burkholderia Mallei (Pseudomonas mallei);