

phosphite.

d. Other Australia Group-controlled precursor chemicals not also identified as Schedule 1, 2, or 3 chemicals under the CWC, as follows, and mixtures in which at least one of the following chemicals constitutes 30 percent or more of the weight of the mixture:

d.1. (C.A.S. #1341-49-7) Ammonium hydrogen fluoride;

d.2. (C.A.S. #107-07-3) 2-Chloroethanol;

d.3. (C.A.S. #100-37-8)
N,N-Diethylaminoethanol;

d.4. (C.A.S. #108-18-9) Di-isopropylamine;

d.5. (C.A.S. #124-40-3) Dimethylamine;

d.6. (C.A.S. #506-59-2) Dimethylamine hydrochloride;

d.7. (C.A.S. #7664-39-3) Hydrogen fluoride;

d.8. (C.A.S. #3554-74-3)
3-Hydroxyl-1-methylpiperidine;

d.9. (C.A.S. #76-89-1) Methyl benzilate;

d.10. (C.A.S. #1314-80-3) Phosphorus pentasulfide;

d.11. (C.A.S. #75-97-8) Pinacolone;

d.12. (C.A.S. #151-50-8) Potassium cyanide;

d.13. (C.A.S. #7789-23-3) Potassium fluoride;

d.14. (C.A.S. #7789-29-9) Potassium bifluoride;

d.15. (C.A.S. #3731-38-2) 3-Quinuclidone;

d.16. (C.A.S. #1333-83-1) Sodium bifluoride;

d.17. (C.A.S. #143-33-9) Sodium cyanide;

d.18. (C.A.S. #7681-49-4) Sodium fluoride;

d.19. (C.A.S. #1313-82-2) Sodium sulfide;

d.20. (C.A.S. #637-39-8) Triethanolamine hydrochloride;

1C351 Human and zoonotic pathogens and “toxins”, as follows (see List of Items Controlled).

License Requirements

Reason for Control: CB, CW, AT

Control(s) *Country Chart*

CB applies to entire entry CB Column 1

CW applies to 1C351.d.5 and d.6 and a license is required for CW reasons for all destinations, including Canada, as follows: CW applies to 1C351.d.5 for ricin in the form of 1) Ricinus Communis Agglutinin_{II} (RCA_{II}), also known as ricin D or Ricinus Communis Lectin_{III} (RCL_{III}); and 2) Ricinus Communis Lectin_{IV} (RCL_{IV}), also known as ricin E. CW applies to 1C351d.6 for saxitoxin identified by C.A.S. #35523-89-8. See §742.18 of the EAR for licensing information pertaining to chemicals subject to restriction pursuant to the Chemical Weapons Convention (CWC). The Commerce Country Chart is not designed to determine licensing requirements for items controlled for CW reasons.

AT applies to entire entry AT Column 1

License Exceptions

LVS: N/A

GBS: N/A

CIV: N/A

List of Items Controlled*Unit:* \$ value.

● *Related Controls:* Certain forms of ricin and saxitoxin in 1C351.d.5. and d.6 are CWC Schedule 1 chemicals (see §742.18 of the EAR). The U.S. Government must provide advance notification and annual reports to the OPCW of all exports of Schedule 1 chemicals. See §745.1 of the EAR for notification procedures. See 22 CFR part 121, Category XIV and §121.7 for additional CWC Schedule 1 chemicals controlled by the Department of State. All vaccines and “immunotoxins” are excluded from the scope of this entry. Certain medical products and diagnostic and food testing kits that contain biological toxins controlled under paragraph (d) of this entry, with the exception of toxins controlled for CW reasons under d.5 and d.6, are excluded from the scope of this entry. Vaccines, “immunotoxins”, certain medical products, and diagnostic and food testing kits excluded from the scope of this entry are controlled under ECCN 1C991. For the purposes of this entry, only saxitoxin is controlled under paragraph d.6; other members of the paralytic shellfish poison family (e.g. neosaxitoxin) are classified as EAR99. *Clostridium perfringens* strains, other than the epsilon toxin-producing strains of *Clostridium perfringens* described in c.14, are excluded from the scope of this entry, since they may be used as positive control cultures for food testing and quality control.

Related Definitions: 1.) For the purposes of this entry “immunotoxin” is defined as an antibody-toxin conjugate intended to destroy specific target cells (e.g., tumor cells) that bear antigens homologous to the antibody. 2.) For the purposes of this entry “subunit” is

defined as a portion of the “toxin”.

Items:

- a. Viruses, as follows:
 - a.1. Chikungunya virus;
 - a.2. Congo-Crimean haemorrhagic fever virus;
 - a.3. Dengue fever virus;
 - a.4. Eastern equine encephalitis virus;
 - a.5. Ebola virus;
 - a.6. Hantaan virus;
 - a.7. Japanese encephalitis virus;
 - a.8. Junin virus;
 - a.9. Lassa fever virus
 - a.10. Lymphocytic choriomeningitis virus;
 - a.11. Machupo virus;
 - a.12. Marburg virus;
 - a.13. Monkey pox virus;
 - a.14. Rift Valley fever virus;
 - a.15. Tick-borne encephalitis virus (Russian Spring-Summer encephalitis virus);
 - a.16. Variola virus;
 - a.17. Venezuelan equine encephalitis virus;
 - a.18. Western equine encephalitis virus;
 - a.19. White pox;
 - a.20. Yellow fever virus;

- a.21. Kyasanur Forest virus;
- a.22. Louping ill virus;
- a.23. Murray Valley encephalitis virus;
- a.24. Omsk haemorrhagic fever virus;
- a.25. Oropouche virus;
- a.26. Powassan virus;
- a.27. Rocio virus;
- a.28. St. Louis encephalitis virus;
- a.29. Hendra virus (Equine morbillivirus);
- a.30. South American haemorrhagic fever (Sabia, Flexal, Guanarito);
- a.31. Pulmonary and renal syndrome-haemorrhagic fever viruses (Seoul, Dobrava, Puumala, Sin Nombre); *or*
- a.32. Nipah virus.
- b. Rickettsiae, as follows:
 - b.1. Bartonella quintana (Rochalimea quintana, Rickettsia quintana);
 - b.2. Coxiella burnetii;
 - b.3. Rickettsia prowasecki; *or*
 - b.4. Rickettsia rickettsii.
- c. Bacteria, as follows:
 - c.1. Bacillus anthracis;
 - c.2. Brucella abortus;
 - c.3. Brucella melitensis;
 - c.4. Brucella suis;
 - c.5. Burkholderia mallei (Pseudomonas mallei);
 - c.6. Burkholderia pseudomallei (Pseudomonas pseudomallei);
 - c.7. Chlamydia psittaci;
 - c.8. Clostridium botulinum;
 - c.9. Francisella tularensis;
 - c.10. Salmonella typhi;
 - c.11. Shigella dysenteriae;
 - c.12. Vibrio cholerae;
 - c.13. Yersinia pestis;
 - c.14. Clostridium perfringens, epsilon toxin producing types; *or*
 - c.15. Enterohaemorrhagic Escherichia coli, serotype O157 and other verotoxin producing serotypes.
- d. “Toxins”, as follows, and “subunits” thereof:
 - d.1. Botulinum toxins;
 - d.2. Clostridium perfringens toxins;
 - d.3. Conotoxin;
 - d.4. Microcystin (Cyanginosin);
 - d.5. Ricin;
 - d.6. Saxitoxin;
 - d.7. Shiga toxin;
 - d.8. Staphylococcus aureus toxins;
 - d.9. Tetrodotoxin;

- d.10. Verotoxin;
- d.11. Aflatoxins;
- d.12. Abrin;
- d.13. Cholera toxin;
- d.14. Diacetoxyscirpenol toxin;
- d.15. T-2 toxin;
- d.16. HT-2 toxin;
- d.17. Modeccin toxin;
- d.18. Volkensin toxin; *or*
- d.19. Viscum Album Lectin 1 (Viscumin).

- a. Viruses, as follows:
 - a.1. African swine fever virus;
 - a.2. Avian influenza virus that are:
 - a.2.a. Defined in EC Directive 92/40/EC (O.J. L.16 23.1.92 p.19) as having high pathogenicity, as follows:
 - a.2.a.1. Type A viruses with an IVPI (intravenous pathogenicity index) in 6 week old chickens of greater than 1.2; *or*
 - a.2.a.2. Type A viruses H5 or H7 subtype for which nucleotide sequencing has demonstrated multiple basic amino acids at the cleavage site of haemagglutinin;
 - a.3. Bluetongue virus;
 - a.4. Foot and mouth disease virus;
 - a.5. Goat pox virus;
 - a.6. Porcine herpes virus (Aujeszky's disease);
 - a.7. Swine fever virus (Hog cholera virus);
 - a.8. Lyssa virus;
 - a.9. Newcastle disease virus;
 - a.10. Peste des petits ruminants virus;
 - a.11. Porcine enterovirus type 9 (swine vesicular disease virus);
 - a.12. Rinderpest virus;
 - a.13. Sheep pox virus;
 - a.14. Teschen disease virus;
 - a.15. Vesicular stomatitis virus;

1C352 Animal pathogens, as follows (see List of Items Controlled).

License Requirements

Reason for Control: CB, AT

<i>Control(s)</i>	<i>Country Chart</i>
CB applies to entire entry	CB Column 1
AT applies to entire entry	AT Column 1

License Exceptions

LVS: N/A
 GBS: N/A
 CIV: N/A

List of Items Controlled

Unit: \$ value
Related Controls: All vaccines are excluded from the scope of this entry. See also 1C991.
Related Definition: N/A
Items: