**Category XIV - Toxicological Agents, Including Chemical Agents, Biological Agents, and Associated Equipment**

\*(a) Chemical agents, as follows:

**(1)** Nerve agents, as follows:

**(i)** O-Alkyl (equal to or less than C10, including cycloalkyl) alkyl (Methyl, Ethyl, n-Propyl or Isopropyl) phosphonofluoridates, such as: Sarin (GB): O-Isopropyl methylphosphonofluoridate ([CAS 107-44-8](https://pubchem.ncbi.nlm.nih.gov/search/#query=107-44-8)) (CWC Schedule 1A); and Soman (GD): O-Pinacolyl methylphosphonofluoridate ([CAS 96-64-0](https://pubchem.ncbi.nlm.nih.gov/search/#query=96-64-0)) (CWC Schedule 1A);

**(ii)** O-Alkyl (equal to or less than C10, including cycloalkyl) N,N-dialkyl (Methyl, Ethyl, n-Propyl or Isopropyl) phosphoramidocyanidates, such as: Tabun (GA): O-Ethyl N, N-dimethylphosphoramidocyanidate ([CAS 77-81-6](https://pubchem.ncbi.nlm.nih.gov/search/#query=77-81-6)) (CWC Schedule 1A); or

**(iii)** O-Alkyl (H or equal to or less than C10, including cycloalkyl) S-2-dialkyl (Methyl, Ethyl, n-Propyl or Isopropyl) aminoethyl alkyl (Methyl, Ethyl, n-Propyl or Isopropyl) phosphonothiolates and corresponding alkylated and protonated salts, such as VX: O-Ethyl S-2-diisopropylaminoethyl methyl phosphonothiolate ([CAS 50782-69-9](https://pubchem.ncbi.nlm.nih.gov/search/#query=50782-69-9)) (CWC Schedule 1A);

**(2)** Amiton: O,O-Diethyl S-[2(diethylamino)ethyl] phosphorothiolate and corresponding alkylated or protonated salts ([CAS 78-53-5](https://pubchem.ncbi.nlm.nih.gov/search/#query=78-53-5)) (CWC Schedule 2A);

**(3)** Vesicant agents, as follows:

**(i)** Sulfur mustards, such as: 2-Chloroethylchloromethylsulfide ([CAS 2625-76-5](https://pubchem.ncbi.nlm.nih.gov/search/#query=2625-76-5)) (CWC Schedule 1A); Bis(2-chloroethyl)sulfide (HD) ([CAS 505-60-2](https://pubchem.ncbi.nlm.nih.gov/search/#query=505-60-2)) (CWC Schedule 1A); Bis(2-chloroethylthio)methane ([CAS 63839-13-6](https://pubchem.ncbi.nlm.nih.gov/search/#query=63839-13-6)) (CWC Schedule 1A); 1,2-bis (2-chloroethylthio)ethane ([CAS 3563-36-8](https://pubchem.ncbi.nlm.nih.gov/search/#query=3563-36-8)) (CWC Schedule 1A); 1,3-bis (2-chloroethylthio)-n-propane ([CAS 63905-10-2](https://pubchem.ncbi.nlm.nih.gov/search/#query=63905-10-2)) (CWC Schedule 1A); 1,4-bis (2-chloroethylthio)-n-butane (CWC Schedule 1A); 1,5-bis (2-chloroethylthio)-n-pentane (CWC Schedule 1A); Bis (2-chloroethylthiomethyl)ether (CWC Schedule 1A); Bis (2-chloroethylthioethyl)ether ([CAS 63918-89-8](https://pubchem.ncbi.nlm.nih.gov/search/#query=63918-89-8)) (CWC Schedule 1A);

**(ii)** Lewisites, such as: 2-chlorovinyldichloroarsine ([CAS 541-25-3](https://pubchem.ncbi.nlm.nih.gov/search/#query=541-25-3)) (CWC Schedule 1A); Tris (2-chlorovinyl) arsine ([CAS 40334-70-1](https://pubchem.ncbi.nlm.nih.gov/search/#query=40334-70-1)) (CWC Schedule 1A); Bis (2-chlorovinyl) chloroarsine ([CAS 40334-69-8](https://pubchem.ncbi.nlm.nih.gov/search/#query=40334-69-8)) (CWC Schedule 1A);

**(iii)** Nitrogen mustards, or their protonated salts, as follows:

**(A)** HN1: Bis (2-chloroethyl) ethylamine ([CAS 538-07-8](https://pubchem.ncbi.nlm.nih.gov/search/#query=538-07-8)) (CWC Schedule 1A);

**(B)** HN2: Bis (2-chloroethyl) methylamine ([CAS 51-75-2](https://pubchem.ncbi.nlm.nih.gov/search/#query=51-75-2)) (CWC Schedule 1A);

**(C)** HN3: Tris (2-chloroethyl) amine ([CAS 555-77-1](https://pubchem.ncbi.nlm.nih.gov/search/#query=555-77-1)) (CWC Schedule 1A); or

**(D)** Other nitrogen mustards, or their salts, having a propyl, isopropyl, butyl, isobutyl, or tertiary butyl group on the bis(2-chloroethyl) amine base;

**Note 1 to paragraph (**A**)(3)(**III**):**

Pharmaceutical formulations containing nitrogen mustards or certain reference standards for these formulations are not considered to be chemical agents and are subject to the EAR when: (1) The pharmaceutical is in the form of a final medical product; or (2) the reference standard contains salts of HN2 [bis(2-chloroethyl) methylamine], the quantity to be shipped is 150 milligrams or less, and individual shipments do not exceed twelve per calendar year per end user.

**Note 2 to paragraph (**A**)(3)(**III**):**

A “final medical product,” as used in this paragraph, is a pharmaceutical formulation that is (1) designed for testing and administration in the treatment of human medical conditions, (2) prepackaged for distribution as a clinical or medical product, and (3) approved for marketing by the Food and Drug Administration or has a valid investigational new drug application (IND) in effect, in accordance with [21 CFR part 312](https://www.law.cornell.edu/cfr/text/21/part-312).

**(iv)** Ethyldichloroarsine (ED) ([CAS 598-14-1](https://pubchem.ncbi.nlm.nih.gov/search/#query=598-14-1)); or

**(v)** Methyldichloroarsine (MD) ([CAS 593-89-5](https://pubchem.ncbi.nlm.nih.gov/search/#query=593-89-5));

**(4)** Incapacitating agents, such as:

**(i)** 3-Quinuclindinyl benzilate (BZ) ([CAS 6581-06-2](https://pubchem.ncbi.nlm.nih.gov/search/#query=6581-06-2)) (CWC Schedule 2A);

**(ii)** Diphenylchloroarsine (DA) ([CAS 712-48-1](https://pubchem.ncbi.nlm.nih.gov/search/#query=712-48-1)); or

**(iii)** Diphenylcyanoarsine (DC) ([CAS 23525-22-6](https://pubchem.ncbi.nlm.nih.gov/search/#query=23525-22-6));

**(5)** Chemical warfare agents not enumerated above adapted for use in war to produce casualties in humans or animals, degrade equipment, or damage crops or the environment. (***See*** the CCL at ECCNs 1C350, 1C355, and 1C395 for control of certain chemicals not adapted for use in war.)

**Note to paragraph (**A**)(5):**

“Adapted for use in war” means any modification or selection (such as altering purity, shelf life, dissemination characteristics, or resistance to ultraviolet radiation) designed to increase the effectiveness in producing casualties in humans or animals, degrading equipment, or damaging crops or the environment.

**Note 1 to paragraph (**A**):**

Paragraph (a) of this category does not include the following: Cyanogen chloride, Hydrocyanic acid, Chlorine, Carbonyl chloride (Phosgene), Ethyl bromoacetate, Xylyl bromide, Benzyl bromide, Benzyl iodide, Chloro acetone, Chloropicrin (trichloronitromethane), Fluorine, and Liquid pepper.

**Note 2 to paragraph (**A**):**

Regarding U.S. obligations under the Chemical Weapons Convention (CWC), refer to Chemical Weapons Convention Regulations (CWCR) ([15 CFR parts 710](https://www.law.cornell.edu/cfr/text/15/part-710) through 721). As appropriate, the CWC schedule is provided to assist the exporter.

\*(b) Biological agents and biologically derived substances and genetic elements thereof as follows:

**(1)** Genetically modified biological agents:

**(i)** Having non-naturally occurring genetic modifications that are known to or are reasonably expected to result in an increase in any of the following:

**(A)** Persistence in a field environment (***i.e.,*** resistance to oxygen, UV damage, temperature extremes, arid conditions, or decontamination processes); or

**(B)** The ability to defeat or overcome standard detection methods, personnel protection, natural or acquired host immunity, host immune response, or response to standard medical countermeasures; and

**(ii)** Being any micro-organisms/toxins or their non-naturally occurring genetic elements as listed below:

**(A)** Bacillus anthracis;

**(B)** Botulinum neurotoxin producing species of Clostridium;

**(C)** Burkholderia mallei;

**(D)** Burkholderia pseudomallei;

**(E)** Ebola virus;

**(F)** Foot-and-mouth disease virus;

**(G)** Francisella tularensis;

**(H)** Marburg virus;

**(I)** Variola major virus (Smallpox virus);

**(J)** Variola minor virus (Alastrim);

**(K)** Yersinia pestis; or

**(L)** Rinderpest virus.

**(2)** Biological agent or biologically derived substances controlled in ECCNs 1C351, 1C353, or 1C354:

**(i)** Physically modified, formulated, or produced as any of the following:

**(A)** 1-10 micron particle size;

**(B)** Particle-absorbed or combined with nano-particles;

**(C)** Having coatings/surfactants, or

**(D)** By microencapsulation; and

**(ii)** Meeting the criteria of paragraph (b)(2)(i) of this category in a manner that is known to or is reasonably expected to result in an increase in any of the following:

**(A)** Persistence in a field environment (***i.e.,*** resistant to oxygen, UV damage, temperature extremes, arid conditions, or decontamination processes);

**(B)** Dispersal characteristics (e.g., reduced susceptibility to shear forces, optimized electrostatic charges); or

**(C)** The ability to defeat or overcome: standard detection methods, personnel protection, natural or acquired host immunity, or response to standard medical countermeasures.

**Note 1 to paragraph (**B**):**

Non-naturally occurring means that the modification has not already been observed in nature, was not discovered from samples obtained from nature, and was developed with human intervention.

**Note 2 to paragraph (**B**):**

This paragraph does not control biological agents or biologically derived substances when these agents or substances have been demonstrated to be attenuated relative to natural pathogenic isolates and are incapable of causing disease or intoxication of ordinarily affected and relevant species (e.g., humans, livestock, crop plants) due to the attenuation of virulence or pathogenic factors. This paragraph also does not control genetic elements, nucleic acids, or nucleic acid sequences (whether recombinant or synthetic) that are unable to produce or direct the biosynthesis of infectious or functional forms of the biological agents or biologically derived substances that are capable of causing disease or intoxication of ordinarily affected and relevant species.

**Note 3 to paragraph (**B**):**

Biological agents or biologically derived substances that meet both paragraphs (b)(1) and (b)(2) of this category are controlled in paragraph (b)(1).

\*(c) Chemical agent binary precursors and key precursors, as follows:

**(1)** Alkyl (Methyl, Ethyl, n-Propyl or Isopropyl) phosphonyl difluorides, such as: DF: Methyl Phosphonyldifluoride ([CAS 676-99-3](https://pubchem.ncbi.nlm.nih.gov/search/#query=676-99-3)) (CWC Schedule 1B); Methylphosphinyldifluoride ([CAS 753-59-3](https://pubchem.ncbi.nlm.nih.gov/search/#query=753-59-3)) (CWC Schedule 2B);

**(2)** O-Alkyl (H or equal to or less than C10, including cycloalkyl) O-2-dialkyl (methyl, ethyl, n-Propyl or isopropyl) aminoethyl alkyl (methyl, ethyl, N-propyl or isopropyl) phosphonite and corresponding alkylated and protonated salts, such as QL: O-Ethyl-2-di-isopropylaminoethyl methylphosphonite ([CAS 57856-11-8](https://pubchem.ncbi.nlm.nih.gov/search/#query=57856-11-8)) (CWC Schedule 1B);

**(3)** Chlorosarin: O-Isopropyl methylphosphonochloridate ([CAS 1445-76-7](https://pubchem.ncbi.nlm.nih.gov/search/#query=1445-76-7)) (CWC Schedule 1B);

**(4)** Chlorosoman: O-Pinacolyl methylphosphonochloridate ([CAS 7040-57-5](https://pubchem.ncbi.nlm.nih.gov/search/#query=7040-57-5)) (CWC Schedule 1B); or

**(5)** Methylphosphonyl dichloride ([CAS 676-97-1](https://pubchem.ncbi.nlm.nih.gov/search/#query=676-97-1)) (CWC Schedule 2B); Methylphosphinyldichloride ([CAS 676-83-5](https://pubchem.ncbi.nlm.nih.gov/search/#query=676-83-5)) (CWC Schedule 2B).

**(d)** [Reserved]

**(e)** Defoliants, as follows:

**(1)** 2,4,5-trichlorophenoxyacetic acid ([CAS 93-76-5](https://pubchem.ncbi.nlm.nih.gov/search/#query=93-76-5)) mixed with 2,4-dichlorophenoxyacetic acid ([CAS 94-75-7](https://pubchem.ncbi.nlm.nih.gov/search/#query=94-75-7)) (Agent Orange ([CAS 39277-47-9](https://pubchem.ncbi.nlm.nih.gov/search/#query=39277-47-9))); or

**(2)** Butyl 2-chloro-4-fluorophenoxyacetate (LNF).

\*(f) Parts, components, accessories, attachments, associated equipment, materials, and systems, as follows:

**(1)** Any equipment for the dissemination, dispersion, or testing of articles controlled in paragraphs (a), (b), (c), or (e) of this category, as follows:

**(i)** Any equipment “specially designed” for the dissemination and dispersion of articles controlled in paragraphs (a), (b), (c), or (e) of this category; or

**(ii)** Any equipment “specially designed” for testing the articles controlled in paragraphs (a), (b), (c), (e), or (f)(4) of this category and developed under a Department of Defense contract or other funding authorization.

**(2)** Any equipment, containing reagents, algorithms, coefficients, software, libraries, spectral databases, or alarm set point levels developed under a Department of Defense contract or other funding authorization, for the detection, identification, warning, or monitoring of:

**(i)** Articles controlled in paragraphs (a) or (b) of this category; or

**(ii)** Chemical agents or biological agents specified in the Department of Defense contract or other funding authorization.

**Note 1 to paragraph (**F**)(2):**

This paragraph does not control articles that are (a) determined to be subject to the EAR via a commodity jurisdiction determination (see [§ 120.4](https://www.law.cornell.edu/cfr/text/22/120.4) of this subchapter), or (b) identified in the relevant Department of Defense contract or other funding authorization as being developed for both civil and military applications.

**Note 2 to paragraph (**F**)(2):**

Note 1 does not apply to defense articles enumerated on the USML.

**(3)** [Reserved]

**(4)** For individual protection or collective protection against the articles controlled in paragraphs (a) and (b) of this category, as follows:

**(i)** M53 Chemical Biological Protective Mask or M50 Joint Service General Purpose Mask (JSGPM);

**(ii)** Filter cartridges containing sorbents controlled in paragraph (f)(4)(iii) or (n) of this category;

**(iii)** Carbon meeting MIL-DTL-32101 specifications (e.g., ASZM-TEDA carbon); or

**(iv)** Ensembles, garments, suits, jackets, pants, boots, or socks for individual protection, and liners for collective protection that allow no more than 1% breakthrough of GD or no more than 2% breakthrough of any other chemical controlled in paragraph (a) of this category, when evaluated by executing the applicable standard method(s) of testing described in the current version of Test Operating Protocols (TOPs) 08-2-201 or 08-2-501 and using the defined Department of Defense-specific requirements;

**(5)**-(6) [Reserved]

**(7)** Chemical Agent Resistant Coatings that have been qualified to military specifications (MIL-PRF-32348, MIL-DTL-64159, MIL-C-46168, or MIL-DTL-53039); or

**(8)** Any part, component, accessory, attachment, equipment, or system that:

**(i)** Is classified;

**(ii)** Is manufactured using classified production data; or

**(iii)** Is being developed using classified information.

**Note to paragraph (**F**)(8):**

“Classified” means classified pursuant to [Executive Order 13526](https://www.govinfo.gov/link/cpd/executiveorder/13526), or predecessor order, and a security classification guide developed pursuant thereto or equivalent, or to the corresponding classification rules of another government.

**(g)** Antibodies, recombinant protective antigens, polynucleotides, biopolymers, or biocatalysts (including their expression vectors, viruses, plasmids, or cultures of specific cells modified to produce them) as follows:

**(1)** When exclusively funded by a Department of Defense contract for detection of the biological agents at paragraph (b)(1)(ii) of this category even if naturally occurring;

**(2)** Joint Biological Agent Identification and Diagnostic System (JBAIDS) Freeze Dried reagents listed by JRPD-ASY-No and Description respectively as follows:

**(i)** JRPD-ASY-0016 Q-Fever IVD Kit;

**(ii)** JRPD-ASY-0100 Vaccinia (Orthopox);

**(iii)** JRPD-ASY-0106 Brucella melitensis (Brucellosis);

**(iv)** JRPD-ASY-0108 Rickettsia prowazekii (Rickettsia);

**(v)** JRPD-ASY-0109 Burkholderia ssp. (Burkholderia);

**(vi)** JRPD-ASY-0112 Eastern equine encephalitis (EEE);

**(vii)** JRPD-ASY-0113 Western equine encephalitis (WEE);

**(viii)** JRPD-ASY-0114 Venezuelan equine encephalitis (VEE);

**(ix)** JRPD-ASY-0122 Coxiella burnetii (Coxiella);

**(x)** JRPD-ASY-0136 Influenza A/H5 IVD Detection Kit;

**(xi)** JRPD-ASY-0137 Influenza A/B IVD Detection Kit; or

**(xii)** JRPD-ASY-0138 Influenza A Subtype IVD Detection Kit;

**(3)** Critical Reagent Polymerase (CRP) Chain Reactions (PCR) assay kits with Catalog-ID and Catalog-ID Product respectively as follows:

**(i)** PCR-BRU-1FB-B-K Brucella Target 1 FastBlock Master Mix Biotinylated;

**(ii)** PCR-BRU-1FB-K Brucella Target 1 FastBlock Master Mix;

**(iii)** PCR-BRU-1R-K Brucella Target 1 LightCycler/RAPID Master Mix;

**(iv)** PCR-BURK-2FB-B-K Burkholderia Target 2 FastBlock Master Mix Biotinylated;

**(v)** PCR-BURK-2FB-K Burkholderia Target 2 FastBlock Master Mix;

**(vi)** PCR-BURK-2R-K Burkholderia Target 2 LightCycler/RAPID Master Mix;

**(vii)** PCR-BURK-3FB-B-K Burkholderia Target 3 FastBlock Master Mix Biotinylated;

**(viii)** PCR-BURK-3FB-K Burkholderia Target 3 FastBlock Master Mix;

**(ix)** PCR-BURK-3R-K Burkholderia Target 3 LightCycler/RAPID Master Mix;

**(x)** PCR-COX-1FB-B-K Coxiella burnetii Target 1 FastBlock Master Mix Biotinylated;

**(xi)** PCR-COX-1R-K Coxiella burnetii Target 1 LightCycler/RAPID Master Mix;

**(xii)** PCR-COX-2R-K Coxiella burnetii Target 2 LightCycler/RAPID Master Mix;

**(xiii)** PCR-OP-1FB-B-K Orthopox Target 1 FastBlock Master Mix Biotinylated;

**(xiv)** PCR-OP-1FB-K Orthopox Target 1 FastBlock Master Mix;

**(xv)** PCR-OP-1R-K Orthopox Target 1 LightCycler/RAPID Master Mix;

**(xvi)** PCR-OP-2FB-B-K Orthopox Target 2 FastBlock Master Mix Biotinylated;

**(xvii)** PCR-OP-3R-K Orthopox Target 3 LightCycler/RAPID Master Mix;

**(xviii)** PCR-RAZOR-BT-X PCR-RAZOR-BT-X RAZOR CRP BioThreat-X Screening Pouch;

**(xix)** PCR-RIC-1FB-K Ricin Target 1 FastBlock Master Mix;

**(xx)** PCR-RIC-1R-K Ricin Target 1 LightCycler/RAPID Master Mix;

**(xxi)** PCR-RIC-2R-K Ricin Target 2 LightCycler/RAPID Master Mix; or

**(xxii)** PCR-VEE-1R-K Venezuelan equine encephalitis Target 1 LightCycler/RAPID Master Mix; or

**(4)** Critical Reagent Program Antibodies with Catalog ID and Product respectively as follows:

**(i)** AB-AG-RIC Aff. Goat anti-Ricin;

**(ii)** AB-ALVG-MAB Anti-Alphavirus Generic Mab;

**(iii)** AB-AR-SEB Aff. Rabbit anti-SEB;

**(iv)** AB-BRU-M-MAB1 Anti-Brucella melitensis Mab 1;

**(v)** AB-BRU-M-MAB2 Anti-Brucella melitensis Mab 2;

**(vi)** AB-BRU-M-MAB3 Anti-Brucella melitensis Mab 3;

**(vii)** AB-BRU-M-MAB4 Anti-Brucella melitensis Mab 4;

**(viii)** AB-CHOL-0139-MAB Anti-V.cholerae 0139 Mab;

**(ix)** AB-CHOL-01-MAB Anti-V. cholerae 01 Mab;

**(x)** AB-COX-MAB Anti-Coxiella Mab;

**(xi)** AB-EEE-MAB Anti-EEE Mab;

**(xii)** AB-G-BRU-A Goat anti-Brucella abortus;

**(xiii)** AB-G-BRU-M Goat anti-Brucella melitensis;

**(xiv)** AB-G-BRU-S Goat anti-Brucella suis;

**(xv)** AB-G-CHOL-01 Goat anti-V.cholerae 0:1;

**(xvi)** AB-G-COL-139 Goat anti-V.cholerae 0:139;

**(xvii)** AB-G-DENG Goat anti-Dengue;

**(xviii)** AB-G-RIC Goat anti-Ricin;

**(xix)** AB-G-SAL-T Goat anti-S. typhi;

**(xx)** AB-G-SEA Goat anti-SEA;

**(xxi)** AB-G-SEB Goat anti-SEB;

**(xxii)** AB-G-SEC Goat anti-SEC;

**(xxiii)** AB-G-SED Goat anti-SED;

**(xxiv)** AB-G-SEE Goat anti-SEE;

**(xxv)** AB-G-SHIG-D Goat anti-Shigella dysenteriae;

**(xxvi)** AB-R-BA-PA Rabbit anti-Protective Antigen;

**(xxvii)** AB-R-COX Rabbit anti-C. burnetii;

**(xxviii)** AB-RIC-MAB1 Anti-Ricin Mab 1;

**(xxix)** AB-RIC-MAB2 Anti-Ricin Mab 2;

**(xxx)** AB-RIC-MAB3 Anti-Ricin Mab3;

**(xxxi)** AB-R-SEB Rabbit anti-SEB;

**(xxxii)** AB-R-VACC Rabbit anti-Vaccinia;

**(xxxiii)** AB-SEB-MAB Anti-SEB Mab;

**(xxxiv)** AB-SLT2-MAB Anti-Shigella-like t x2 Mab;

**(xxxv)** AB-T2T-MAB1 Anti-T2 Mab 1;

**(xxxvi)** AB-T2T-MAB2 Anti-T2 Toxin 2;

**(xxxvii)** AB-VACC-MAB1 Anti-Vaccinia Mab 1;

**(xxxviii)** AB-VACC-MAB2 Anti-Vaccinia Mab 2;

**(xxxix)** AB-VACC-MAB3 Anti-Vaccinia Mab 3;

**(xl)** AB-VACC-MAB4 Anti-Vaccinia Mab 4;

**(xli)** AB-VACC-MAB5 Anti-Vaccinia Mab 5;

**(xlii)** AB-VACC-MAB6 Anti-Vaccinia Mab 6;

**(xliii)** AB-VEE-MAB1 Anti-VEE Mab 1;

**(xliv)** AB-VEE-MAB2 Anti-VEE Mab 2;

**(xlv)** AB-VEE-MAB3 Anti-VEE Mab 3;

**(xlvi)** AB-VEE-MAB4 Anti-VEE Mab 4;

**(xlvii)** AB-VEE-MAB5 Anti-VEE Mab 5;

**(xlviii)** AB-VEE-MAB6 Anti-VEE Mab 6; or

**(xlix)** AB-WEE-MAB Anti-WEE Complex Mab.

**(h)** Vaccines exclusively funded by a Department of Defense contract, as follows:

**(1)** Recombinant Botulinum ToxinA/B Vaccine;

**(2)** Recombinant Plague Vaccine;

**(3)** Trivalent Filovirus Vaccine; or

**(4)** Vaccines specially designed for the sole purpose of protecting against biological agents and biologically derived substances identified in paragraph (b) of this category.

**Note to paragraph (**H**):**

See ECCN 1A607.k for military medical countermeasures such as autoinjectors, combopens, and creams.

**(i)** Modeling or simulation tools, including software controlled in paragraph (m) of this category, for chemical or biological weapons design, development, or employment developed or produced under a Department of Defense contract or other funding authorization (e.g., the Department of Defense's HPAC, SCIPUFF, and the Joint Effects Model (JEM)).

**(j)**-(l) [Reserved]

**(m)** Technical data (as defined in [§ 120.10](https://www.law.cornell.edu/cfr/text/22/120.10) of this subchapter) and defense services (as defined in [§ 120.9](https://www.law.cornell.edu/cfr/text/22/120.9) of this subchapter) directly related to the defense articles enumerated in paragraphs (a) through (l) and (n) of this category. (*See* [§ 125.4](https://www.law.cornell.edu/cfr/text/22/125.4) of this subchapter for exemptions.)

**(n)** Developmental countermeasures or sorbents funded by the Department of Defense via contract or other funding authorization;

**Note 1 to paragraph (**N**):**

This paragraph does not control countermeasures or sorbents that are (a) in production, (b) determined to be subject to the EAR via a commodity jurisdiction determination (see [§ 120.4](https://www.law.cornell.edu/cfr/text/22/120.4) of this subchapter), or (c) identified in the relevant Department of Defense contract or other funding authorization as being developed for both civil and military applications.

**Note 2 to paragraph (**N**):**

Note 1 does not apply to defense articles enumerated on the USML, whether in production or development.

**Note 3 to paragraph (**N**):**

This paragraph is applicable only to those contracts and funding authorizations that are dated July 28, 2017, or later.

**(o)**-(w) [Reserved]

**(x)** Commodities, software, and technology subject to the EAR (see [§ 120.42](https://www.law.cornell.edu/cfr/text/22/120.42) of this subchapter) used in or with defense articles controlled in this category.

**Note to paragraph (**X**):**

Use of this paragraph is limited to license applications for defense articles controlled in this category where the purchase documentation includes commodities, software, or technology subject to the EAR (see [§ 123.1(b)](https://www.law.cornell.edu/cfr/text/22/123.1#b) of this subchapter).