

**ALPHABETICAL INDEX
TO THE COMMERCE CONTROL LIST**

This index is not an exhaustive list of controlled items.

Supplement No. 4 to Part 774 – Commerce Control List Order of Review
identifies the steps to follow when reviewing the Commerce Control List.

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Combined cycle engines/components.....	9A011, 9A619
Combustion regulation devices, missile engines.....	9A118
Common channel signaling equipment/systems.....	5A991.c.8
Common channel signaling, technology for the development of equipment employing.....	5D001.c.5
Communications cable systems to detect surreptitious intrusion.....	5A003.a
Communication channel controllers.....	5A991.b.4.b
Communication equipment, airborne.....	7A994
Communication (mobile) equipment, assemblies and components.....	5A991.g
Communications interception devices, parts and accessories.....	5A980, 5D980 or 5E980
Communications Systems (underwater).....	5A001.b.1
Compasses.....	8A609.y.5, 8A620.y.5, 8A992.j, 9A610.y.13
Compasses (gyro-astro) & other position or orientation deriving devices.....	7A004
Compasses (gyro-astro) & devices, other than those of 7A004.....	7A104
Complex programmable logic devices (CPLD).....	3A001.7.a, 3A991.d
Components made from Fluorinated compounds.....	1A001
Components/structures for spacecraft.....	9A010
Composite conductors, superconductive.....	1C005
Composite or laminate development software.....	1D002
Composite structures, as tubes.....	1A202
Composite structures or laminates.....	1A002
Composite (structural) production equipment, n.e.s.....	1B999.e
Composite (structural) production equipment controlled by 1B999, software for.....	1D999
Composite materials, ceramic-ceramic.....	1C007.c.1.a
Composites production equipment.....	1B001
Composite structures for propulsion systems or space vehicles.....	9A110, 9A619.x
Composite structures for unmanned aerial vehicles.....	9A610.t
Composites (structural) production equipment.....	1B101

Description	ECCN Citation
Compound rotary tables for machine tools.....	2B008.d
Compound semiconductor integrated circuits	3A001.a.11
Compound semiconductor photocathodes	6A002.a.2.c.3
Compressors.....	9A619.x
Compressors, bellows-sealed scroll-type.....	2B233
Compressors, turboexpander.....	1B232
Compressors, turbo/centrifugal/axial flow.....	9A619.x
Computer, electronic assemblies & equipment & components	4A001, 4A003, 4A004 or 4A994
Computer, electronic components	4A101
Computer, electronic components	4A102
Computers, parts, components, accessories... for military applications, not on USML	3A611
Computer aided design (CAD) equipment for semiconductor devices or integrated circuits	3B991.b.2.c
Computer-aided-design (CAD) software for IC's & semiconductors.....	3D003
Computer interconnect equipment.....	4A003.g
Computer/assemblies/components, neural.....	4A004.b
Computer/assemblies/components, optical.....	4A004.c
Computers, electronic assemblies, and related equipment and components not controlled by 4A001 or 4A003	4A994
Computers, analog & analog ruggedized	4A101
Computers for fingerprint equipment	4A980
Computers, digital ruggedized	4A101
Computers/assemblies/components, systolic array.....	4A004.a
Computers, analog	4A001
Computers, digital	4A003
Computers, digital	4A004
Computers, digital.....	4A001
Computers, hybrid.....	4A102
Computers, parts, components ... for military application not on USML.....	4A611/3A611
Computers and electronic assemblies (hybrid), and specially designed components therefor.....	4A994.k
Computers, with extended operating temperature range	4A001.a.1
Computers, radiation hardened	4A001.a.2
Concealment and deception equipment (military), i.e. special paints, decoys, smoke or obscuration equipment and simulators.....	0A617
Concealed object detection equipment	2A984, 2D984 or 2E984
Condensers for use in nuclear reactors	2A290.a
Condensers or heat exchangers	2B350.d
Conductive polymers	1C001.c
Conductors, superconductive composite	1C005
Congo-Crimean hemorrhagic fever virus (a.k.a. Crimean-Congo hemorrhagic	

Description	ECCN Citation
fever virus)	1C351.a.10
Connector backshells, electric	3A611.y.9
Conotoxins	1C351.d.6
Construction equipment “specially designed” for military use	0A617.y.1
Contactors	3A611.y.27
Contagious bovine pleuropneumonia (<i>Mycoplasma mycoides</i> subspecies <i>mycoides</i> SC (small colony))	1C351.c.16
Containers, ISO intermodal containers for packing defense articles or “600 series” items	0A617.y.3
Containers, chemical	2B350.c
Containment devices (not enumerated under ECCN 1B608 or in USML Category IV or V) for the testing of high explosives or explosive devices	1B234
Containment facilities	2B352.a.1
Continuity of operation software	3D005
Continuous mixers	1B118
Control units for metallurgical melting & casting furnaces.....	2B227
Control systems, on-line development of gas turbine engines	9B002, 9B619.a
Controllable-pitch propellers	8A002.o.2.a
Controlled atmosphere melting & casting furnaces.....	2B227
Controlled environment (vacuum or inert gas) induction furnaces	2B226
Controlled nucleation thermal decomposition (CNTD) equipment.....	2B005.a.1.b
Controllers, machine tool (CNC).....	1B001.a
Controllers for high explosive handling robots	2B207
Controllers, robot	2B007
Conventional military steel helmets.....	1A613.y.1
Converter integrated circuits.....	3A001.a.5
Converters, frequency	3A225
Converters, frequency extender	3A001.b.7
Cooling fluids - electronic	1C006.d
Cooling fluids, fluorocarbon electronic	1C006.d
Cooling systems, freon and chilled water	1B999.d
Copper or phosphor bronze mesh packings	1A226
Copper metal vapor lasers.....	6A005.b
Coprocessor microcircuits	3A001.a.3 Note
Correlation-velocity sonar log equipment	6A001.b
Counter Improvised Explosive Device equipment	5A001.h
<i>Coxiella burnetii</i>	1C351.c.13
CR (Dibenz-(b,f)-1,4-oxazepine) (CAS 257-07-8)	1C607.a.4
Crime science laboratories, parts and accessories, nonmilitary mobile.....	9A980
Crimean-Congo hemorrhagic fever virus (a.k.a. Congo-Crimean hemorrhagic fever virus)	1C351.a.10
Cross (tangential) flow filtration equipment.....	2B352.d
Crossed-field amplifier tubes	3A001.b.1.b

Description	ECCN Citation
Crucibles, liquid actinide resistant.....	2A225
Crucibles, tantalum	2A225.b or c
Cryocoolers for optical sensors, space qualified.....	6A002.d.1
Cryocoolers for optical sensors, non-space qualified	6A002.d.2
Cryogenic and superconductive equipment, parts, components, accessories	9A620
Cryogenic and superconductive test equipment	9B620
Cryogenic and superconductive software	9D620
Cryogenic and superconductive technology	9E620
Cryptanalytic equipment and components, mass market.....	5A992
Cryptanalytic systems, equipment and components	5A004.a
Cryptographic enabling systems, equipment, integrated circuits, etc.....	5A002.b
Cryptographic enabling software	5D002.b
Cryptographic enabling technology	5E002.b
Cryptographic equipment and components, mass market	5A992
Cryptologic equipment, software for the development, production or use of, mass market ..	5D992
Cryptologic equipment and components, mass market.	5A992
Cryptographic systems, equipment and components for data confidentiality > 56 bits	5A002.a
Crystal pullers and furnaces.....	3B991.b.1.c
CS (o-Chlorobenzylidenemalononitrile or o-Chlorobenzalmalononitrile) (CAS 2698-41-1)	1C607.a.2
CTPB (Carboxy-terminated polybutadiene).....	1C111.b.1
Custom integrated circuits	3A001.a.2 or a.10
Cutting tool inserts, single diamond point	2B998.b
Cutting machines, gears	2B003
Cutting equipment for prepregs/preform production.....	1B101.d
CVD (Chemical vapor deposition) equipment	1B001.d.2
CVD (Chemical vapor deposition) equipment	2B005.a
CVD (Chemical vapor deposition) equipment	1B101.c.2
CVD (Chemical vapor deposition) furnaces, other than those controlled by 2B005.a, designed or modified for the densification of carbon-carbon composites	2B105
CW (Chemical warfare) precursors	1C350
Cyanogen chloride (506-77-4).....	1C355.b.1.b, 1E355.b.2
Cyber hacking systems, equipment and components	5A004
Cylinder wall lubrication technology, diesel engines	9E003.e.3
DACs (Digital-to-analog converters).....	3A001.a.5
DBRN (Data Based Referenced Navigation) system technology.....	7E004.a.7
Damping, flotation or lubricating fluids	1C006.c
Data acquisition systems for gas turbine engine development	9B002, 9B619.a
Data (message) switching equipment, systems, components and assemblies	5A991.c.1
Data acquisition equipment for wind tunnels, automatic.....	9B005
Data Based Referenced Navigation (DBRN) systems for underwater navigation, technology	7E004.a.7

Description	ECCN Citation
Datagram packet routing or switching equipment	5A991.c.3
Decanters, centrifugal	2B352.c
Decontamination equipment	1A004 or 1A995
Decontamination equipment (military) for toxicological agents	1A607.g
Deep-hole drilling machines	2B001.f
Defect, error or contaminant detection equipment for wafers or substrates	3B992.b.1
Deformable mirrors	6A004.a.1
Degassing equipment	2B350
DEGDN (diethylene glycol dinitrate)	1C111.c.5
Demolition blocks	0A604.a
Depleted Uranium	1A290
Depth sounders	6A001.a.1
Design integration of guidance sets, software	7D103
Detection and protection equipment and components	1A004, 1A995, 2B351 or 2B352
Detection equipment (military) for toxicological agents	1A607.h
Detection equipment, seismic	6A999.a
Detection equipment, radiation	1A004, 1A995 or 1A999.a
Detection equipment, radiographic	1A999.b
Detection systems for explosives and detonators	1A004.d, 2A983, 2D983 or 2E983
Detection or location systems or transmitting and receiving arrays (acoustic)	6A001.a.1.b
Detectors, optical	6A002.a
Detectors, radiation hardened	6A102
Detectors, space-qualified solid state optical	6A002.a.1
Detonation cord	1A008 or 1C992.c
Detonator detection	2A983, 2D983 or 2E983
Detonators and multipoint initiation systems	3A229
Detonator firing sets, for multiple detonators of 3A232	1A007 or 3A229
Detonators, electric or non-electric	1C608.d or 1C992.e
Detonators, exploding bridge wire (EBW)	1A007
Detonators, exploding bridge (EB)	1A007
Detonators, exploding foil initiators (EB)	1A007
Detonators for military explosives	0A604
Detonators, slapper (electric)	1A007
Deuterium fluoride-carbon dioxide (DF-CO2) lasers	6A005.d.5
Deuterium fluoride (DF) lasers	6A005.d.5
Di-isopropylamine	1C350.d.7
Diacetoxyscirpenol	1C351.d.7
Dials, indicator	3A611.y.26
Dialkyl (Me, Et, n-Pr or i-Pr) N,N-dialkyl (Me, Et, n-Pr, or i-Pr)-phosphoramidates ..	1C355.a.2.c
Diamond cutting tool inserts, single point	2B998.b
Diamond film substrate development/production technology	3E003.d

Description	ECCN Citation
Diaphragm valves	2B350.g
Dibromodimethyl ether (CAS 4497-29-4)	1C607.a.7
Dibromotetrafluoroethane based damping or flotation fluids.....	1C006.c.1
Dichlorodimethyl ether (ClCi) (CAS 542-88-1)	1C607.a.8
Die bonder, stored program controlled	3B991.b.3.a
Diesel engines for submarines	8A620.d
Diesel engines, nonmagnetic	8A609.b
Diesel engines (air-cooled) and engine blocks for armored vehicles.....	0A606.c
Dies, bellows-forming.....	2B228.c
Diesel engines, n.e.s.....	9A990
Diesel cycle engine, air independent	8A002.j
Diethyl ethylphosphonate	1C350.b.3
Diethyl methylphosphonate	1C350.b.4
Diethyl methylphosphonite.....	1C350.b.5
Diethyl phosphite	1C350.c.1
Diethyl-N, N-dimethylphosphoramidate	1C350.b.6
Diethylamine.....	1C350.d.3
Diethylaminoethanol.....	1C350.d.4
Diethylene glycol dinitrate (DEGDN).....	1C111.c.5
Diffusion bonding technology, metal working	2E003.b.1.b
Diffusion bonding technology/data, super alloys or Ti alloys.....	2E003.b.2.b
Diffusion bonding tools, dies, molds or fixtures.....	1B003
Digital array processors	3A001.a.3 Note
Digital computers.....	4A003
Digital computers.....	4A994.b
Digital computers, electronic assemblies & related equipment.....	4A003
Digital computers, electronic assemblies & related equipment.....	4A001
Digital computers, logic processors	4A003
Digital computers, ruggedized	4A101
Digital computers, signal processing	4A003
Digital computers, vector processors.....	4A003
Digital computer electronic assemblies, parallel processing	4A003.c
Digital computer systems	4A004
Digital computer systems	4A003.c
Digital computer systems	4A003.b
Digital computer systems.....	4A001
Digital coprocessors.....	3A001.a.3 Note
Digital differential analyzer, ruggedized	4A101
Digital electronic control software for propulsion systems, aerospace test facilities or air breathing aero-engine test facilities.....	9D003, 9D619
Digital exchanges, telecommunication	5A991.c
Digital instrumentation data recorders.....	3A002.a.6

Description	ECCN Citation
Digital signal processors	4A003
Digital time delay generators	3A999.e1
Digital-to-analog converter integrated circuits (DACs)	3A001.a.5
Digitally controlled radio receivers	5A001.b.5
Digitizers, waveform.....	3A002.h
Diisopropylaminoethanethiol hydrochloride	1C350.b.7
Dimensional inspection or measuring systems or equipment not controlled by 2B006 or 2B206.....	2B996
Dimensional inspection machines.....	2B206
Dimensional inspection equipment/systems	2B006.a
Dimensional inspection equipment/systems	2B006.c
Dimensional measuring equipment, instruments/systems	2B006.b
Dimethyl ethylphosphonate	1C350.b.12
Dimethyl methylphosphonate	1C350.b.13
Dimethyl phosphite.....	1C350.c.2
Dimethylamine.....	1C350.d.8
Dimethylamine hydrochloride	1C350.d.9
Dinitrogen tetroxide ()	1C111.a.3.b
Dinitrogen trioxide.....	1C111.a.3.a
Dinitrogen pentoxide	1C111.a.3.c
2,2' Dinitropropanol	1C018
Diodes, laser.....	6A005.d.1
Diortho tolyl-urethane.....	1C018.g
Diphenyl urethane.....	1C018.f
Direct view imaging equipment.....	6A002.c
Direct-acting hydraulic pressing technology for metal working	2E003.b.2.c
Direct Digital Synthesizer (DDS) integrated circuits	3A001.a.13
Direction finding equipment & components, surveillance	5A001.e
Direction finding equipment, parts & components, navigation, not controlled under 7A003 or 7A103	7A994
Direction finding systems, equipment & components, navigation (inertial)	7A003
Direction finding systems, equipment & components, navigation, not controlled under 7A003	7A103
Directional solidification casting control software	9D004.c
Directional solidification casting equipment	9B001.a, 9B619.a
Discharge type arms.....	0A503
Discrete microwave transistors	3A611.d
Discrete microwave transistor technology	3E611.b.4
Display, 3D (software for)	7D004.g
Disruptors.....	1A006.b
Disruptors.....	1A006.b
Dissemination equipment (military) for riot control agents in 1C607.a.....	1A607.e

Description	ECCN Citation
Distillation columns, hydrogen-cryogenic.....	1B228
Distillation towers, packings	1A226
Dive computers	8A992.j
Diver deterrent acoustic systems	8A002.r
DNAN (2,4-dinitroanisole) (CAS 119-27-7).....	Annex to Cat 1 “List of Explosives” 44
Dobrava-Belgrade virus	1C351.a.11
Doppler laser interferometers (DLIs).....	6A225
Double-door pass-through decontamination autoclaves.....	2B352.a.2.a
Double seal valves	2B350.g
Drilling equipment	2B999.h
Drilling machines, deep-hole	2B001.f
Drone (military) production facilities	9B610.c
Dummy rounds and blank rounds (unless linked or belted), not incorporating a lethal or non-lethal projectile(s)	EAR99
Dye lasers.....	6A005.c
Dye lasers.....	6A205
Dynamic adaptive routing equipment.....	5A991.c.9
Dynamic wavefront (phase) measuring equipment	6A004.f
Dynamic adaptive routing software	5D991.a
E-beam welders.....	2B999.e
Earth moving equipment, large.....	2B999.h.2
Eastern equine encephalitis virus.....	1C351.a.12
EB-PVD (Electron beam physical vapor deposition) equipment	2B005.c
Ebolavirus (includes all members of Ebolavirus genus).....	1C351.a.13
Eddy current test equipment for nuclear reactors	2A291.d
EDMs, non-wire feed types	2B001.d
EDMs, wire feed type	2B991d.1
Ejection seat mounted survival aids for military aircraft.....	9A610.y.6
Electric cattle prods.....	0A503
Electric detonators, explosive	3A232a
Electric fans	3A611.y.2
Electric propulsion engines.....	8A002o.2.b
Electrical contacts	3A611.y.19
Electrical discharge machines, non wire feed (CNC).....	2B001.d
Electrical discharge machines (EDM) of the wire feed type	2B991.d.2
Electrical guide pins.....	3A611.y.20
Electrically driven explosive detonators.....	3A232.a
Electro-optic materials	6C004
Electro-optical device manufacturing equipment and systems.....	3B991.b Note
Electro-optical integrated circuits	3A001.a.6
Electrolysis cells, amalgam lithium isotope separation	1B233.b.3
Electrolytic cells for fluorine production.....	1B225

Description	ECCN Citation
Electrolytic cells for fluorine production not controlled by 1B225	1B999.a
Electromagnetic interference (EMI) protection technology	7E102
Electromagnetic isotope separators.....	1B226
Electromagnetic pulse (EMP) protection, detectors	6A102
Electromagnetic pulse (EMP) protection technology, avionics.....	7E102
Electromagnetic pulse (EMP) recovery software	3D005
Electromagnetic radiation sensors, optical fiber.....	6A002.d.3.a
Electromagnetic signature reduction devices.....	1A101
Electromagnetic signature reduction materials.....	1C101
Electromagnetic underwater communications systems	5A001.b.1.b
Electromagnets, superconductive	3A201.b
Electromagnets, superconductive	3A001.e.3
Electron beam cutting machines (CNC)	2B001.e.1.b
Electron beam equipment for mask making/semiconductor devices.....	3B001.f.2
Electron beam equipment for projection image transfer.....	3B991.b.2.g
Electron beam melting furnaces.....	2B227.b
Electron beam physical vapor deposition (EB-PVD) equipment	2B005.c
Electron beam sensitive resist materials	3C002.b
Electron beam systems, for probing semiconductor devices	3B992.b.5
Electron beam systems.....	3B991.b.1.j
Electron beam test systems	3B992.b.5
Electron bombardment mass spectrometers.....	3A233.d
Electron tube manufacturing equipment and components.....	3B991.a
Electron tube inspection or testing equipment and components.....	3B992.a
Electronic assemblies.....	4A003
Electronic assemblies and related equipment not controlled by 4A001 or 4A003.....	4A994
Electronic assemblies specially designed to provide feedback capability in systems controlled by 2B006.b.3.....	2B006.b.4
Electronic cameras	6A003.a.5
Electric chairs.....	0A981
Electrical connectors.....	3A611.y.1
Electronic components.....	3A001
Electronic components.....	3A201
Electronic components.....	3A101
Electronic components (military)	3A611
Electronic components and materials inspection or testing equipment, components and accessories	3B992
Electronic components and materials manufacturing equipment	3B991
Electronic components and materials manufacturing equipment, not controlled by 3B001	3C001
Electronic computers	4A994.a
Electronic computers & related equipment.....	4A001, 4A003, 4A004 or 4A994

Description	ECCN Citation
Electronic computers & related equipment.....	4A101
Electronic computers & related equipment.....	4A102
Electronic cooling fluids.....	1C006.d
Electronic framing cameras.....	6A203.b.2
Electron sensing devices.....	6A002.a.2.a.2.b
Electronic streak cameras & streak tubes.....	6A003.a.3
Electronic streak cameras & streak tubes.....	6A203.b.1
Electrostatic Discharge (ESD) recovery software.....	3D005
Electronically steerable antennae, phased array.....	5A001.d
Electroplating equipment.....	2B999.i
EMP/EMI protection technology, avionic systems.....	7E102
EMP/ESD recovery software.....	3D005
Encoders, rotary input shaft type, and rings, discs or scales therefor.....	3A001.f
Encryption equipment, assemblies & components.....	5A002
Encryption hardware components.....	Cat 5 pt 2 Note 3 (b)
Encryption software.....	5D002
End effectors, robot.....	2B207
End effectors, robot.....	2B007
Energetic ionic materials.....	Annex to Cat 1 List of Explosives 48
Energy storage capacitors.....	3A001.e.2
Engines, diesel n.e.s.....	9A990
Engines (marine), n.e.s.....	8A992.g
Engines (submarine), n.e.s.....	8A992.g
Engines (air breathing reciprocating or rotary internal combustion type).....	9A012.b.4
Enterohaemorrhagic E. coli (EHEC).....	1C351.c.17
Environmental chambers.....	1B018.b, 9B106, or 9B610.b
Environmental chambers, capable of simulating flight conditions.....	9B106, 9B610.b
Environmental test facilities for 7A611 (except 7A611.y) or guidance equipment.....	7B611
Epitaxial growth equipment.....	3B001.a
Epitaxial growth stored program controlled equipment.....	3B991.b.1.d
Epitaxial wafers, Cadmium telluride (CdTe).....	6C002.b
Epoxy resin matrix impregnated carbon fibers or filamentary materials.....	1C010.e Note 1
Equine morbillivirus (Hendra virus).....	1C351.a.18
Equipment (i.e., test, inspection, and production equipment) and related commodities “specially designed” for the “development,” “production,” repair, overhaul, or refurbishing of commodities enumerated or otherwise described in USML Category XVIII.....	6B619.a
Equipment (military) “specially designed” for the destruction of chemical warfare agents.....	1B607.a
Equipment and tooling “specially designed” for the “development,” “production,” repair, overhaul, or refurbishing of commodities controlled by 1A607.e, .f, .g, .h, or .j or by USML Category XIV(f).....	1B607.c

Description	ECCN Citation
Erbium oxide (erbia) (Er ₂ O ₃) made/coated crucibles	2A225.a.4
Etching stored program controlled equipment.....	3B991.b.1.h
Ethers, as lubricating fluid	1C006.b.1
Ethyl centralites	1C018.a
Ethyl iodoacetate (CAS 623-48-3).....	1C607.a.14
Ethyl phenyl urethane	1C018.e
Ethyl phosphinyl dichloride.....	1C350.b.15
Ethyl phosphinyl difluoride	1C350.b.16
Ethyl phosphonous dichloride.....	1C350.b.15
Ethyl phosphonous difluoride	1C350.b.16
Ethyl phosphonyl dichloride	1C350.b.17
Ethyl-NN-diphenylurea (ethyl unsymmetrical diphenylurea)	1C018.d
Ethyldibromoarsine (CAS 683-43-2)	1C607.a.9
Ethyldiethanolamine (139-87-7).....	1C350.c.3
Evaporators for concentrated lithium hydroxide solution	1B233.b.4
Exchange columns, liquid-liquid for lithium amalgams	1B233.b.1
Exchanges, telecommunication.....	5A991.c
Excimer lasers	6A005.d.4
Execution of human beings, equipment for	0A981
Expert systems - integration systems technology	2E003.e
Exploding foil initiators (EFI)	1A007
Exploding bridge (EB) detonators	1A007
Exploding bridge wire (EBW) detonators	1A007
Explosive, high	1C239
Explosive/munitions environment handling robots	2B007.b
Explosive detection.....	1A004.d
Explosive detonator firing sets.....	1A007.a
Explosives or detonator detection equipment, software, or technology ..	2A983, 2D983 or 2E983
Explosive detonators, electric	1A007.b or 3A232
Explosive devices , charges, components - commercial.....	1C608, 1A008 or 1C992.1
Explosives (military) production equipment	1B018.a
Explosives (military) in charges for civil applications	1A008 or 1C608
FADEC (Full authority digital electronic engine control) software	9D003, 9D619
FADEC (Full authority digital electronic engine control) technology	9E003.h, 9E619
Fan blade (hollow) technology	9E003, 9E619
Fans, electric	3A611.y.2
Fast Fourier Transform (FFT) processors.....	3A001.a.12
Fast switching function modules or assemblies.....	3A228.c
Fast fourier transform processors, acoustic signal processing.....	6A001.a.2.c
Fault tolerance FADEC software.....	9D003, 9E619
Fermenters (biological processing), and components designed for such fermenters	2B352.b
Fertilizers containing ammonium nitrate	1C997

Description	ECCN Citation
Fiber, equipment for the production of.....	1B999
Fiber and filamentary material.....	1C010
Fiber and filamentary material.....	1C210
Fiber converting equipment, polymeric to carbon or silicon carbon	1B001.d.1
Fiber laser components	6A005.e.3
Fiber optic cable.....	5A001.c
Fiber optic gyro coil winding machines	7B003
Fiber optic magnetometers.....	6A006.c
Fiber optic hull penetrators/connectors.....	8A002.c
Fiber optic wave division multiplex equipment.....	5A991.b.5
Fiber preforms, metal coated, for fiber prepregs in 9C110.....	9C110
Fiber prepregs, resin impregnated, for items in 9A110	9C110
Fiber, rare-earth metal doped double-clad	6C005.b
Fiber reinforcement, production equipment	1B001.d
Fiber straining equipment	1B001.d.1
Fiber surface treatment equipment.....	1B101.d
Fibrous or filamentary materials.....	1C210
Fibrous or filamentary materials.....	1C010
Fibrous or filamentary materials, carbon	1A002.b.1
Fibrous and filamentary materials for use in composite structures	1C990
Fibrous or filamentary material production equipment	1B001
Fibrous or filamentary material production equipment	1B101.c
Fibrous and filamentary materials development, production or use technology	1E994
Field programmable gate arrays (FPGA).....	3A001.a.7, 3A991.d
Field programmable interconnects (FPIC).....	3A001.a.7, 3A991.d
Field programmable logic arrays (FPLA).....	3A001.a.7, 3A991.d
Field programmable logic devices (FPLD).....	3A001.a.7, 3A991.d
Field test equipment to evaluate or calibrate the operation of systems described in USML Category XII(a), (b), or (c)	7B611
Filament winding machines	1B001.a
Filament winding machines	1B101.a
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Filters, optical	6A994.a
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Description	ECCN Citation
Filters for pneumatic/hydraulic/oil/fuel systems in surface vessels of war	8A609.y.2
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Fluorocarbon electronic cooling fluids.....	1C006.d
Fluxgate magnetometer technology.....	6E003.f
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Fly-by-light flight control system software.....	7D003.e, 7D004.c
Fly-by-light or fly-by-wire technology.....	7E004.b
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Focal plane arrays, linear & 2D.....	6A002.a.3
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Framing cameras, electronic type.....	6A203.b.2
Framing cameras, mechanical.....	6A203.a.1
Framing tubes & solid state imaging devices.....	6A203.b.3
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Francisella tularensis.....	1C351.c.14
Free electron laser magnet wiggler manufacturing or inspection equipment.....	6B995.a.1
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Description	ECCN Citation
Freon and chilled water cooling systems	1B999.d
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Frequency agile systems	5A002.e
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Frequency changers (a.k.a. converters or inverters) and generators, “software” “specially designed” to enhance or release the performance characteristics of equipment to meet or exceed the performance characteristics in ECCN 3A225	3D202
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Gallium III/V compound substrates, hetero-epitaxial grown-multi-layer	3C001.c
Gallium nitride (GaN) “substrates”, ingots, boules, or other preforms of those materials.....	3C005.a
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Description	ECCN Citation
Gas centrifuge rotor assembly equipment.....	2B228.a
Gas krytron tubes	3A228.a
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Gas lasers	6A005.a
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Gas turbine aeroengines, civil non-certified/supersonic.....	9A001
Gas turbine blade, manufacturing or measuring equipment	9B001, 9B619
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Gas turbine blades, vanes or tip shroud casting equipment, tooling or fixtures	9B991, 9B619
Gas turbine brush seal production/test equipment.....	9B003, 9B619
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Gas turbine engine development control systems or instrumentation	9B002, 9B619
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Description	ECCN Citation
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GPS (Global positioning system) equipment/components	7A005
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Gravimeters (Gravity meters) & components, gravity	6A007.b
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Description	ECCN Citation
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Gravity meters (gravimeters) & components.....	6A107
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GUDN (Guanylurea dinitramide) FOX-12 (CAS 217464-38-5)	Annex to Cat 1 List of Explosives 46
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Gun, stun	0A503
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Description	ECCN Citation
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Harnesses, complete.....	9A992, 9A610.h
Heading sensors, towed hydrophones.....	6A001.a.2.b.4
Heading sensors	6A001.a.2.d
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Helix Tubes.....	3A001.b.1.a.4
Helix traveling wave tubes (TWTs) technology.....	3E611.b.1
Helmet, military, shells, liners, comfort pads.....	1A613.c and .y.1
Helminthosporium oryzae (Cochliobolus miyabeanus).....	1C354.b.2
Hemishell dimensional inspection equipment/systems	2B006.d
Hendra virus (Equine morbillivirus).....	1C351.a.18
Herpesvirus (Suid herpesvirus 1; a.k.a. Pseudorabies virus, Aujeszky’s disease)	1C351.a.50
Hetero-epitaxial grown multi-layer substrates.....	3C001
Hetero-structure semiconductor technology	3E003.b
High energy storage capacitors.....	3A001.e.2
High explosive containment vessels, chambers, containers, and similar containment devices not enumerated under ECCN 1B608 or in USML Category IV or V.....	1B234
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High-speed cameras and imaging devices and “components” therefore not controlled by ECCN 6A003	6A203
High-speed cameras and imaging devices and “components” therefore, “software” “specially designed” to enhance or release the performance characteristics of devices to meet or exceed the performance characteristics described in ECCN 6A203	6D201
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Description	ECCN Citation
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Holographic sights	0A504.b
Holographic sights that have focal plane array (visible wavelength only), technology for ...	0E504
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Hoses (cooling systems) for ground vehicles	0A606.v.7
Hoses (fuel) for gas turbine engines	9A619.y.3
Hoses (fuel and hydraulic) for military aircraft	9A610.y.10
Hoses (hydraulic system) for ground vehicles.....	0A606.y.10
Hoses for pneumatic/hydraulic/oil/fuel systems in surface vessels of war.....	8A609.y.2
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Hot isostatic presses (HIPS)	2B204
Hot isostatic densification technology/data, Al/Ti/Superalloys.....	2E003.b.2.d
Hot isostatic presses (HIPS).....	2B004
Hot cap sealers (semi-automatic or automatic) for ceramic microcircuit	3B991.b.3.c
Hot cell manipulators.....	2B225
Hot cells	0B999
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HTPB (Hydroxy-terminated polybutadiene) propellant additive	1C111.b.2
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Hybrid computers & components	4A001
Hybrid computers and electronic assemblies.....	4A994.k
Hybrid computers	4A102
Hybrid computer electronic systems/electronic assemblies	4A001.a
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Hydraulic fluids	1C996
Hydraulic forming equipment.....	2B999.b
Hydraulic fracturing items	0A998.b
Hydraulic fracturing ‘proppant,’ ‘fracking fluid,’ and chemical additives therefor	0A998.b.2

Description	ECCN Citation
Hydraulic pressing, direct-acting technology	2E003.b.1.c
Hydraulic stretch-forming machines and dies technology.....	2E003.c
Hydrazine.....	1C111.d
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Hydrogen.....	1C980
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Hydrogen fluoride.....	1C350.d.10
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Hydrogen isotope storage & purification systems	1B231.b.2
Hydrogen refrigeration units.....	1B231.b.1
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Hydrophone arrays, towed acoustic.....	6A001.a.2.b
Hydrophone arrays (towed) acoustic data processing source code	6D003.a.2
Hydrophones	6A001.a.2.a
3-Hydroxy-1-methylpiperidine	1C350.d.11
Hydroxy-terminated polybutadiene (HTPB)	1C111.b.2
ICP/MS (Inductively coupled plasma mass spectrometers)	3A233.a
III/V and II/VI semiconductor materials purifying or processing equipment	3B991.b.1.b
III/V compound substrates, gallium or indium.....	3C001.c
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Identification plates for gas turbine engines	9A619.y.7
Igniters	1C608.e or 1C992.f
Image enhancement, digital equipment	4A003
Image enhancement equipment.....	4A994.f
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Imaging device manufacturing equipment and systems	3B991.b Note
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Imaging cameras incorporating solid-state detectors specified by 6A002.a.1.....	6A003.b.5
Imaging devices	6A203.b.3
Imaging equipment, visible & infrared.....	6A002.c
Imaging satellites	9A515
Imaging sensors, multispectral and monospectral	6A002.b

Description	ECCN Citation
Immobilization guns and projectiles.....	0A503
Immunotoxins and vaccines.....	1C991
Impregnated cathodes for electronic tubes	3A001.b.1.c
Imprint lithography equipment	3B001.f.2
Improvised explosive devices (specially designed or modified disposal equipment , components, and accessories)	1A006
Improvised Explosive Devices (IED) activation devices	5A001.h
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IMU platform tester	7B003 or 7B101
IMU stable element handling fixture	7B003 or 7B101
Incinerators designed to destroy the chemicals controlled by 1C350.....	2B350.j
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Indicator dials.....	3A611.y.26
Indicator heads designed/modified for use with balancing machines in 2B119.a.....	2B119.b
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Indium III/V compounds substrates.....	3C001.c
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Induction furnace, vacuum.....	2B226
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Industrial process control hardware/systems designed for power industries controlled by 1B999, software for.....	1D999.a
Inert gas environment induction furnaces.....	2B226
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Inertial measurement equipment.....	7A003
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Inertial navigation, systems/equipment/components	7A003
Inertial navigation systems not controlled by 7A003 or 7A103	7A994
Inertial navigation system software, source code	7D002
Inertial reference Systems (IRS).....	7A003.c
Inertial sensors, optical fiber.....	6A002.d.3.a
Inflatable boats and components.....	8A992.f
Inflation cartridges	8A992.i
Influenza virus (Reconstructed 1918 influenza virus).....	1C351.a.40
Information security defeating, weakening or bypassing systems, equip. and components...5A004	
Information security equipment software, mass market	5D992
.....	
.....	
Information security equipment and components, mass market.....	5A992

Description	ECCN Citation
Information security software	5D002
Information security systems/equipment/devices/components.....	5A002
Information security technology, mass market	5E992
Information security - test, inspection, and production equipment	5B002
Infrared detectors, industrial space qualified	6A002.a.1
Infrared sensors, industrial	6A002.c
Infrared viewers (police model).....	9A980
Inhibited red fuming nitric acid (IRFNA).....	1C111.a.3.e
Initiation systems, single or multipoint (electric)	3A232.b
Injector (free electron laser photo) manufacturing or inspection equipment.....	6B995.a.2
Inorganic overlay coating application technology	2E003.f
Inorganic chemicals listed in Supp. No. 1 to part 754 produced or derived from the Naval Petroleum Reserves	1C980
Inorganic fibers & filamentary materials.....	1C010.c
Inspection equipment (linear-angular for hemishells)	2B006.d
Inspection equipment for composite materials	1B001.f
Inspection machines (dimensional), devices or systems, other than those in 2B006	2B206
International Space Station being developed, launched, and operated under the supervision of NASA and “parts,” “components,” “accessories” and “attachments” that are “specially designed” for the ISS.	9A004.w and .x
Instrumentation for gas turbine development	9B002, 9B619
Instrumentation for wind tunnels	9B005
Instrumentation systems, inertial navigation	7A003
Instrumentation cameras	6A003.a
Integrated circuit assembly equipment	3B991.b.3
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Integrated circuit test equipment, microwave	3B002.c
Integrated circuit test equipment, for (truth table) testing	3B002.b
Integrated circuit, masks	3B001.g
Integrated circuits, compound semiconductor	3A001.a.11
Integrated circuits, custom	3A001.a.10
Integrated circuits, general purpose	3A001.a
Integrated circuits, microwave	3A001.b.2
Integrated circuits, radiation hardened.....	3A001.a.1
Integrated circuits and assemblies manufacturing equipment and systems.....	3B991.b
Integrated circuit and assembly testing equipment.....	3B992.b.4.b
Integrated circuit computer-aided-design (CAD) software	3D003
Integrated circuits and assemblies inspection or testing equipment and systems.....	3B992.b
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Integrated Navigation Systems, designed or modified for use in missiles	7A103.c
Integrated Services Digital Network technology	5E991
Integrated system source code, avionic/mission systems	7D003.c

Description	ECCN Citation
Integration software for expert systems	2E003.e
Integration technology for flight management systems	7E104
Intensity modulator	3A001.i
Intercepting systems and equipment, communications	5A001.f
Intercepting devices, communications	5A980
Interconnect equipment (Computer)	4A003.g
Interconnection equipment	3B991.b.1.1
Interface equipment (military) for use in collecting or processing samples of chemical warfare agents	1A607.j
Interferometers, velocity (VISARs)	6A225
Interlacing machines	1B001.c
Intermediate amplifier equipment	5A991.b Note a.3
International Space Station parts components accessories attachments	9A004.w-y
Interruption, ground fault circuit	3A611.y.18
Interstages for missiles	9A117
Intrinsic magnetic gradiometers	6A006.c.3
Inverse synthetic aperture radar (ISAR)	6A008.d
Inverters (Frequency changers or converters)	3A225
Iodo acetone (CAS 3019-04-3)	1C607.a.12
Ion beam equipment for mask making/semiconductor devices	3B001.f.2
Ion beam equipment for projection image transfer	3B991.b.2.g
Ion beam sensitive resist materials	3C002.b
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Ion implantation equipment	3B001.b
Ion implantation equipment	3B991.b.1.g
Ion implantation production equipment	2B005.b
Ion lasers	6A005.a
Ion or laser beam lithography mask or reticle fabrication equipment	3B991.b.2.d.2
Ion plating production equipment	2B005.g
Ion-enhanced diffusion equipment	3B991.b.1.g
ISDN development/production technology	5E991
Isolated live cultures	see
Cultures	
Isolators capable of use with biological agents	2B352.f.2
Isostatic presses, hot	2B104
Isostatic presses, hot	2B204
Isostatic presses, hot	2B004
Isostatic presses, n.e.s.	2B999.a
Isotope separators, electromagnetic	1B226
James Webb Space Telescope (JWST) and “parts,” “components,” “accessories” and “attachments” that are “specially designed” for the JWST	9A004.u and .v

Description	ECCN Citation
Jamming equipment	5A001.f.3
Japanese encephalitis virus	1C351.a.19
Jet engine lubricating oil	1C980
Jet vane, thrust vector control sub-systems.....	9A106.c
Jet engines/components, pulse	9A111
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Joule-Thomson self-regulating minicoolers	6A002.d.2.b.6
Joy sticks	3A611.y.4
Jumpers, electrical.....	3A611.y.24
Junin virus	1C351.a.20
Kerr or Pocket cells, electro-optical shuttering.....	6A203.b.3.c
Kick motors.....	9A004
Knobs	3A611.y.34
Krytron tubes, gas	3A228.a
Kyasanur Forest disease virus.....	1C351.a.21
Laboratories (mobile), crime science.....	9A980
Laguna Negra virus.....	1C351.a.22
Laminate or composite development software	1D002
Laminates & composite structures, organic metal or carbon.....	1A002
Laminates, rockets/propulsion systems/space vehicles	9A110
Land inertial navigation equipment	7A003
Land-based gravity meters production equipment.....	6B007
Laser acoustic detection equipment	6A005.a
Laser based linear position feedback units	2B006.b.2
Laser based measuring instruments	2B006.b.3.a
Laser beam cutting machines (CNC).....	2B001.e.1.c
Laser beam equipment for mask making/semiconductor devices	3B001.f.2
Laser beam lithography mask or reticle fabrication equipment.....	3B991.b.2.d.2
Laser beam systems, for probing semiconductor devices.....	3B992.b.5
Laser communication technique technology	5E001.b.2
Laser diagnostic equipment	6A005.f.2
Laser diodes	6A005.d.1
Laser diodes designed for telecommunication.....	5A991.b Note b.4
Laser, fiber (components)	6A005.e.3
Laser gyro mirror characterization equipment.....	7B102
Laser microphone.....	6A005.g
Laser pointing devices for use on firearms	0A504.f
Laser pointing devices for use on firearms that have focal plane array (visible wavelength only), technology for	0E504
Laser radar altimeters.....	7A106
Laser radar or Light Detection & Ranging (LIDAR) equipment	6A008.j

Description	ECCN Citation
Laser radar systems.....	6A108
Laser ring gyro test equipment	7B002
Laser, technology	6E003.e
Laser welding machines.....	2B999.c
Lasers	6A005
Lasers	6A205
Lasers	6A995
Lasers for direct write on wafers	3B991.b.2.h
Lassa virus	1C351.a.23
Lathes (CNC).....	2B001.a
Latches for ground vehicles	0A606.y.11
Launch support equipment.....	9A115, 9A610.f
Launch vehicle components/structures	9A010, 9A610.x
Lavatories for military aircraft.....	9A610.y.11
Lavatories for submersible vessels	8A620.y.4
Lavatories for surface vessels of war.....	8A609.y.4
LAX-112 (3,6-diamino-1,2,4,5-tetrazine-1,4-dioxide).....	Annex to Cat 1 List of Explosives 47.b
Leg irons	0A982
Lenses for radiation hardened TV cameras	6A203.d
Lidar equipment (Laser radar)	6A008.j
Life jackets.....	8A992.i
Life rafts for military aircraft.....	9A610.y.12
Light gas guns(Multistage) systems	2B232
Light systems, fuses, and components, for ground vehicles.....	0A606.y.12
Light systems, Stroboscopic	8A992.c
Light systems, underwater	8A002.g
Light systems, underwater	8A002.d.2
Lights, underwater	8A992.j
Lights, search	0A617.y.1 and .y.2
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Lightweight monolithic mirrors.....	6A004.a.2
Lightweight turbofan/turbojet engines.....	9A101, 9A619.a
Line terminating equipment.....	5A991.b Note a.2
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Linear position feedback units or sensors.....	2B006.b.2
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Linear-angular inspection equipment for hemishells.....	2B006.d
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Liquid or water jet cutting machines (CNC).....	2B001.e.1.a
Liquid lasers.....	6A005.c
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Description	ECCN Citation
Liquid rocket propulsion systems & components.....	9A106
Liquid rocket propulsion systems & components.....	9A006
Liquid rocket propulsion systems	9A005
Liquid, slurry and gel propellant control systems.....	9A106.d
Liquid propellant rocket engines	9A105
Liquid-liquid exchange columns, for lithium amalgams	1B233.b.1
Lithium metal, alloys, compounds, mixtures, products or devices.....	1C233
Lithium isotope separation facilities, plant and equipment	1B233
Lithium amalgam electrolysis cells	1B233.b.3
Lithium amalgam pumps	1B233.b.2
Lithograph templates	3B001.i
Lithography equipment, imprint	3B001.f.2
Lithography equipment, mask making for semiconductor wafer-processing	3B001.f
Lithography mask or reticle fabrication equipment.....	3B991.b.2.d.2
Lithography software	3D003
Location & object detection systems or transmitting and receiving arrays, acoustic ..	6A001.a.1.b
Logic arrays, field programmable (FPLA)	3A001.a.8
Logic processors and assemblies	4A003
Louping ill virus.....	1C351.a.24
Low Light Level (LLL) camera software	6D003
Lubricating materials	1C006.b
Lubricating oil.....	1C980
Lujo virus.....	1C351.a.25
Lumpy skin disease virus.....	1C351.a.26
Lymphocytic choriomeningitis virus	1C351.a.27
Lyssavirus (including rabies virus and all other members of the Lyssavirus genus)	1C351.a.39
Machine tools, E-beam	2B001.e.1.b
Machine tools, laser	2B001.e.1.c
Machine tools, numerically controlled	2B001
Machine tools, numerically controlled	2B201
Machine tools, numerically controlled and using a Magnetorheological finishing (MRF) process.....	2B002
Machine tools, numerically controlled, optical finishing	2B002
Machine tools, water/other liquid jet	2B001.e.1.a
Machine tool assemblies, units or inserts	2B998
Machine tool components and assemblies for 2B006 & 2B007 equipment.....	2B008
Machine tool cutting tools	2B008
Machine tools for generating optical quality surfaces	2B992
Machine tools for grinding (CNC).....	2B001.c
Machine tools for grinding (CNC).....	2B201.b
Machines for milling (CNC).....	2B001.b

Description	ECCN Citation
Machines for milling (CNC).....	2B201.a
Machine tools for turning, grinding, and milling	2B991.d.1
Machines for turning (CNC).....	2B001.a
Machine tool rotary position feedback units.....	2B006.c
Machine tool spindles	2B008.d
Machining centers (CNC).....	2B201
Machining centers (CNC).....	2B001
Machupo virus	1C351.a.28
Magnaporthe oryzae (Pyricularia oryzae).....	1C354.b.6
Magnesium (high purity)	1C228
Magnesium alloy, powder or particulate form	1C002.c.1.e
Magnesium alloys	1C002.b.5
Magnesium, metal and alloys of.....	1C011.a
Magnesium oxide (MgO) made or coated crucibles.....	2A225.a.6
Magnesium metal particulate.....	1C111.a.2.a.4
Magnetic alloy strips.....	1C003.c
Magnetic anomaly detection software	6D003.f.2
Magnetic bearings (suspension).....	2A001.c
Magnetic compensation systems for magnetic and underwater electric field sensors	6A006.d
Magnetic compensation systems software.....	6D003.f.1
Magnetic disk storage	3A002.a.6
Magnetic and Electric Field Sensors “software”	6D003.f
Magnetic gradiometers.....	6A006.c
Magnetic gradiometers, intrinsic	6A006.c.2
Magnetic metals	1C003
Magnetically enhanced, sputtering equipment	3B991.b.1.f
Magnetometers.....	6A006
Magnetometers not controlled by 6A006	6A996.a
Magnetometer systems.....	6A006
Magnetostrictive alloys.....	1C003.b
Mandrels for rotor assembly, bellows forming.....	2B228.a
Mandrels, bellows-forming	2B228.c
Mandrels (precision) for filament winding machines.....	1B201
Manganin gauges, pressure.....	6A226.a
Manifolds (air, fuel, oil) for gas turbine engines	9A619.y.8
Manipulators, remote	2B225
Manipulators, for submersibles	8A002.i
Manned, tethered submersible vehicles	8A001.a
Manned, untethered submersible vehicles	8A001.b
Manufactured gas and synthetic natural gas produced or derived from	

Description	ECCN Citation
Naval Petroleum Reserves	1C984
Map cases for military aircraft	9A610.y.28
Maraging steel	1C116
Maraging steel	1C216
Marburgvirus (includes all members of Marburgvirus genus)	1C351.a.29
Marine acoustic systems	6A001.a
Marine boiler	8A992.1
Marine engines and parts (both inboard and outboard, n.e.s.)	8A992.g
Marine gas turbine engines	9A002
Marine, terrestrial acoustic equipment	6A991
Marx generators	3A999.c
Mask, gas or full face	1A004 or 1A995
Mask or reticle altering holders or equipment	3B991.b.2.d.3
Mask or reticle fabrication equipment	3B991.b.2.d
Mask or reticles or pellicles, stored program controlled inspection equipment	3B991.b.2.e
Mask software	3D003
Mask substrate blanks	3B001.j
Masks	8A992.i
Masks, integrated circuits of 3A001	3B001.g
Masks, mask substrates, mask-making equipment	3B991.b.2
Mass spectrometers & ion sources (UF6 enrichment plant)	3A233
Mass spectrometers, n.e.s.	3A999.b
Materials for reduced electromagnetic reflectivity	1C101
Materials “specially designed” for ground vehicles and related commodities controlled by 0A606 and not elsewhere specified on USML	0C606
Materials “specially designed” for surface vessels of war and related commodities controlled by 8A609	8C609
Miscellaneous materials “specially designed” for military use	0C617
Matrix, organic	1A002.b
MCT (HgCdTe) crystals & epitaxial wafers	6C002.b
Measurement equipment, radiation	1A999.a
Measurement equipment, underwater velocity	6A001.b
Measuring instruments or systems, dimensional	2B006
Measuring and analysis equipment	3B992.b.2
Measuring systems (linear displacement) containing a laser	2B006.b.1.c, 2B206.c
Mechanical cameras, framing	6A003.a.1, 2 or 3
Mechanical caps	3A611.y.29
Mechanical plugs	3A611.y.30
Mechanical-seal or inflatable-seal walkthrough doors	2B352.a.2.c
Media access units	5A991.b Note a.12
Medical countermeasures equipment (military) for use against chemical	

Description	ECCN Citation
warfare agents	1A607.k
Medical facilities for submersible vessels	8A620.y.6
Medical facilities for surface vessels of war	8A609.y.6
Melting furnaces	2B227.b
Mercury amalgam pumps	1B233.b.2
Mercury cadmium telluride crystals & epitaxial wafers	6C002.b
Metal alloy powders or particulate form	1C002.c
Metal alloy particulate	1C111.a.2.a.4
Metal alloys	1C002.b
Metal alloys, aluminum or titanium	1C202
Metal alloys, beryllium	1C230
Metal alloys, boron	1C011.b
Metal alloys, hafnium	1C231
Metal alloys, lithium	1C233
Metal alloys, powder and material production systems and components	1B002
Metal alloys, tungsten	1C226
Metal alloys, tungsten or molybdenum	1C117
Metal alloys, zirconium	1C234
Metal coated fiber preforms	9A110
Metal coated fiber preforms for fiber preregs in 9C110	9C110
Metal or carbon matrix	1A002.b
Metal embrittlement agents	0A617
Metal-organic compounds, aluminum/gallium/indium	3C003
Metal particulate	1C011
Metal powder production equipment	1B102
Metal vapor lasers	6A005.b
Metal working process tools, die & fixture technology	2E003.b.1
Metal working manufacturing processes technology	2E003.b
Metallo-organic or polymeric materials	1C007.e
Metallurgical melting & casting furnaces	2B227
Metals or carbon coated fibers	1C010.e
Metals with high initial relative (magnetic) permeability	1C003.a
Methyl centralites	1C018.a
Methyldiethanolamine (105-59-9)	1C355.b.2.b
Methyl benzilate	1C350.d.12
Microbiological disposal technology	1E351
Microchannel plates, image intensifier tubes	6A002.a.2
Microcomputer microcircuits	3A001.a.3
Microcontroller microcircuits	3A001.a.3
Microcyclus ulei (syn. Dothidella ulei)	1C354b.3
Microcystins (Cyanginosins)	1C351d.9

Description	ECCN Citation
Microelectronic circuits (e.g., integrated circuits and micro-circuits) rated, certified, or otherwise specified or described as meeting or exceeding all the characteristics in 9A515.d and that are “specially designed” for defense articles, “600 series” items, or items controlled by 9A515	9A515.d
Microelectronic circuits (e.g., integrated circuits and micro-circuits) that are rated, certified, or otherwise specified or described as meeting or exceeding all the characteristics in 9A515.e and that are “specially designed” for defense articles controlled by USML Category XV or items controlled by 9A515.....	9A515.e
Microfluorination ion sources.....	3A233.f
Micromachined Angular Rate Sensors	7A994
Microorganisms, genetically modified	1C353
Microphones	3A611.y.6
Microprocessor microcircuits	3A001.a.3
Microprocessor microcircuits above 530 MTOPS development/production technology.....	3E002.g
Microwave amplifiers, solid state.....	3A001.b.4
Microwave frequency extenders, mixers/converters	3A001.b.7
Microwave integrated circuit test equipment.....	3B002.c
Microwave integrated circuits.....	3A001.b.2
Microwave modules.....	3A001.b.2
Microwave or millimeter wave components	3A001.b
Microwave or millimeter wave components software.....	3D001
Microwave or millimeter wave components technology.....	3E001
Microwave “monolithic integrated circuits” (MMIC) power amplifiers.....	3A611.c, 3A001.b.2
Microwave Monolithic Integrated Circuit (MMIC) power amplifier technology	5E001.d or .e, 3E611.b.3, 3E001
Microwave power amplifiers	3A001.b.8
Microwave power modules (MPM).....	3A001.b.9
Microwave transistors (discrete).....	3A001.b.3
Microwave test receivers	3A002.f
Microwave wave components.....	3A001.b
MIG welders	2B999.d
Military commodities.....	0A919
Military components	3A611
Military construction equipment.....	0A617.y
Military electronics (equipment, end items, systems)	3A611
Military explosive production equipment.....	1B018.a
Military ferries, bridges and pontoons	0A617
Military flame throwers with an effective range less than 20 meters	0A602.b
Military harbor entrance detection devices (magnetic, pressure, and acoustic)	8A620
Military helmet.....	0A018

Description	ECCN Citation
Military training equipment	0A614
Military vehicles	0A606
Military vehicle fording kits	0A606
Military vehicle self-launching bridge components	0A606
Millimeter wave components.....	3A001.b
Milling machines, (CNC) with two or more coordinated axes	2B001.b
Milling machines, (CNC) with two or more coordinated axes	2B201.a
Milling machines (CNC).....	2B991.d.1
Mills, fluid energy.....	1B119
Mining equipment.....	2B999.h
Mirror assemblies/segments, space assembly.....	6A004.c.3
Mirror characterization equipment, reflectometers.....	7B102.b
Mirror structures, lightweight foam or composite type	6A004.a.3
Mirrors, actively cooled or heat pipe cooled	6A005.e.1
Mirrors, beam steering	6A004.a.4
Mirrors, cockpit for military aircraft.....	9A610.y.15
Mirrors, optical	6A005.e.2
Mirrors, optical	6A004.a
Missile engine combustion regulation devices	9A118
Missile (usable) guidance sets	7A117
Missile telemetry.....	5A101
Missile modeling, simulation & integration software.....	9D103
Mixed Oxides of Nitrogen (MON)	1C111.a.3.d
Mixers, batch.....	1B117
Mixers, continuous.....	1B118
Mixers, frequency extenders.....	3A001.b.7
Mobile communications equipment, assemblies and components	5A991.g
Modeccin.....	1C351.d.10
Modeling/simulation of guidance sets, software	7D103
Modems.....	5A991.b.2
Modular time interval meter	3A999.e2
Modules, microwave	3A001.b.2
Modules/assemblies, fast switching function	3A228.c
Molecular beam epitaxial growth equipment using gas sources	3B001.a.3
Molecular beam epitaxial growth equipment	3B991.b.1.e
Molecular beam mass spectrometers	3A233.e
Molybdenum alloy fibers.....	1C010.c Note 2
Molybdenum & tungsten metals & alloys	1C117
Monel equipment including valves, piping, tanks and vessels	2B999.f
Monel plate	1C999.c
Monitoring equipment, radiation	1A999.a

Description	ECCN Citation
Monitoring systems, toxic gas	2B351
Monkeypox virus	1C351.a.30
Monolithic integrated circuits	3A001.a Note 2
Monolithic integrated circuit repair or trimming laser equipment.....	3B991.b.1.m
Monolithic Microwave Integrated Circuit (MMIC) amplifiers	3A001.b.12
Monospectral imaging sensors.....	6A002.b
Motion control boards for machine tools.....	2B991.b
Motion simulators or rate tables	2B120
Multi-chamber central wafer handling systems	3B001.e
Multi-channel interval meter.....	3A999.e2
Multichip modules	3A611.h, y.16
Multi-data-stream processing equipment, development or production technology for	4E993
Multi-element detector arrays.....	6A002.a.3
Multi-layer hetero-epitaxial material substrates & wafers.....	3C001
Multi-layer masks (with phase shift layer), for integrated circuits.....	3B001.h
Multichip integrated circuits	3A001.a Note 2
Multichip modules	3A611.h, y.16
Multilevel security capability, equipment.....	5A002.d
Multimode optical fiber & cables, high tensile strength.....	5A001.c
Multiple-seal pumps.....	2B350.i
Multiplex equipment.....	5A991.b Note a.7
Multipoint initiation systems	3A232.b
Multipoint restraint devices	0A982
Multispectral imaging sensors	6A002.b
Multistage light gas gun systems	2B232
Multi-walled piping incorporating a leak detection port	2B350.h
Murray Valley encephalitis virus.....	1C351.a.31
Mycoplasma capricolum subspecies capripneumoniae ("strain F38")	1C351.c.15
Mycoplasma mycoides subspecies mycoides SC (small colony) (a.k.a. contagious bovine pleuropneumonia).....	1C351.c.16
N,N-diisopropyl-beta-aminoethane thiol	1C350.b.8
N,N-diisopropyl-(beta)-amino ethanol	1C350.b.9
N,N-diisopropyl-beta-aminoethyl chloride.....	1C350.b.10
N,N-diisopropyl-(beta)-aminoethyl chloride hydrochloride.....	1C350.b.11
NBC (Nuclear, biological and chemical) detection system software	1D003
NBC (Nuclear, biological and chemical) detection system libraries or parametric technical databases	1E002.g
NN-Diphenylurea (unsymmetrical diphenylurea)	1C018.b
Name plates and identification plates	3A611.y.33
Nanocrystalline alloy strips.....	1C003.c

Description	ECCN Citation
Natural gas liquids and derivatives produced or derived from	
Naval Petroleum Reserves	1C983
Navigation, airborne comm. & other avionics equip. technology	7E004, 7E994
Navigation, airborne communication and other avionics software	7D004, 7D994
Navigation/avionics equipment, systems, parts, components ... for military	7A611, 3A611
Navigation direction finding equipment	7A004-7A008, 7A103-7A105, 7A994
Navigation systems, equipment & components, inertial	7A103
Navigation systems, equipment & components, inertial	7A003
Navigation systems, equipment, parts ... for military not on USML	7A611/3A611
Navigation systems, underwater sonar	7A008
NDT (non-destructive test) inspection equipment (3D)	1B001.f
NDT (non-destructive test) inspection equipment	9B007
Neodymium lasers	6A005.d.6
Neodymium lasers	6A205.f
Nets (submarine or torpedo)	8A620.e
Network analyzers	3A002.e
Network access controllers contained in computer equipment	4A994.i
Network access controllers contained in telecommunications	5A991.b.4.a
Neural computers/assemblies/components	4A004.b
Neural network integrated circuits	3A001.a.9
Neutron generator systems & tubes	3A231
Neutronic calculations/modeling, software for	0D999.a
Newcastle disease virus	1C351.a.32
Nickel alloy	1C002.b.1
Nickel alloy/powder or particulate form	1C002.c.1.a
Nickel aluminides	1C002.a.1
Nickel electroplating equipment	2B999.i
Nickel metal (made from powder)	1C240
Nickel powder	1C240
Night vision devices	6A002.a.2, 6A003.b.3, 6A003.b.4, 6A202 or 6A203
Night vision technology	6E002 or 6E101
Niobium alloys	1C002.b.2
Niobium alloy/powder or particulate form	1C002.c.1.b
Nipah virus	1C351.a.33
3-Nitrazo-1,5 pentane diisocyanate	1C018.1
Nitric acid	1C999.e
Nitrided niobium-titanium-tungsten alloy crucibles	2A225.a.7
2-Nitrodiphenylamine	1C111.c.3 or 1C018.h
Nitrogen dioxide (dinitrogen tetroxide)	1C111.a.3.b
Nitroglycerin (in medicinal form)	1C992.1
Nitroguanidine	1C011.d

Description	ECCN Citation
P-Nitromethylaniline.....	1C018.i
N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethyl-2-chlorides and corresponding protonated salts	1C355.a.2.d
N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethane-2-ols and corresponding protonated salts	1C355.a.2.e
N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethane-2-thiols and corresponding protonated salts	1C355.a.2.f
N,N-Dialkyl (Me, Et, n-Pr or i-Pr) phosphoramidic dihalides	1C355.a.2.b
N-Nonanoylmorpholine, (MPA) (CAS 5299-64-9).....	1C607.a.6
Noise reduction equipment for vessels, acoustic mounts	8A002.o.3.a
Noise cancellation systems for vessels, active.....	8A002.o.3.b
Noise reduction systems for vessels, active	8A002.o.3.b
Non-destructive inspection equipment	1B001.f
Non-destructive test inspection equipment, rocket motor	9B007
Non-fluorinated polymeric substances	1C008
Non-fluorinated polymeric manufactures	1A003
Non-irritant smoke flares, canisters, grenades and charges	1A984
Non-lethal or less-lethal grenades and projectiles	0A503
Non-linear optical materials.....	6C004.c
Non-planar absorbers	1C001.a Note 1.b
Non-tunable continuous wave (CW) lasers	6A005.a or 6A995.e
Non-tunable pulsed lasers	6A005.b or 6A995.d
Non-tunable solid state lasers	6A005a or b or 6A995.f
Nozzles, for producing pyrolytically derived materials.....	1B116
Nozzles, rocket motor (liquid)	9A106.b
Nuclear material handling and processing equipment	2A291
Nuclear materials, facilities, and equipment software	0D001
Nuclear plant commodities, parts and accessories.....	2A291.d
Nuclear reactor, eddy current test equipment	2A291.d
Nuclear reactor equipment	2A291
Nuclear reactor, simulators	2A291.b
Nuclear reactor, ultrasonic test equipment.....	2A291.d
Nuclear technology for the development, production or use of nuclear materials, facilities, and equipment	0E001
Nucleic acid assemblers and synthesizers (partly or entirely automated)	2B352.j
Numerical control for machine tools - software	2D002 and 2D003
Numerical control units for machine tools and numerically controlled machine tools, n.e.s.....	2B991
Numerically controlled machine tools that can be equipped with electronic devices for simultaneous contouring control	2B991.c
O-ring for ground vehicles.....	0A606.y.9

Description	ECCN Citation
Object detection and location systems or transmitting and receiving arrays (acoustic).....	6A001.a.1.b
Ocean salvage systems.....	8A001.e
Off highway wheel tractors.....	9A990
Oil and gas exploration equipment, software, and data	0A998
Oil well cartridges.....	1C608.f or 1C992.g
Oil lines and tubes for military gas turbine engines	9A619.y.2
Oil tank and reservoirs for military gas turbine engines.....	9A619.y.1
Oil, lubricating, cutting, or quenching	1C980
Oils, distillate fuel.....	1C980
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Thrusters, satellites	9A515
Thulium-YAG (Tm:YAG) lasers.....	6A005.c.1, c.2 or c.3
Thulium-YSGG (Tm:YSGG) lasers	6A005.c.1, c.2 or c.3
Thumbcuffs.....	0A983

Description	ECCN Citation
Thumbscrews	0A983
Thumbwheels	3A611.y.22
Thyristor devices and modules, solid-state pulsed power switching	3A001.g
Tick-borne encephalitis virus (Far Eastern subtype, formerly known as Russian Spring-Summer encephalitis virus)	1C351.a.52
Tick-borne encephalitis virus (Siberian subtype, formerly known as West Siberian virus)	1C351.b.3
Tilletia indica	1C354.b.10
Tilt rotor/tilt wing power transfer system technology	9E003.d, 9E610.a
Tilting spindles for machine tools	2B009.c
Time delay general, electronic equipment for	3A999.e
Time interval measurement, electronic equipment for	3A999.e
Time or frequency domain processing & correlation equipment	6A001.a.2.c
TIMS (Thermal ionization mass spectrometers)	3A233.c
Tires (aircraft)	9A610.y.1
Tires (ground vehicles), except run flat	0A606.15
Titanium alloys	1C002.b.3
Titanium alloys, as tubes/solid forms/forgings	1C202.b
Titanium alloy/powder or particulate form	1C002.c.1.c
Titanium aluminides	1C002.a.2
Titanium-based alloys	1C002.b.3
Titanium doped sapphire laser host material	6C005.a
Titanium-sapphire (Ti: Al ₂ O ₃) lasers	6A005.c.1, c.2 or c.3
Titanium-stabilized duplex stainless steel 9Ti-DSS)	1C118
TMETN (trimethylolethane trinitrate)	1C111.c.4
Tooling and equipment “specially designed” for the “development,” “production,” repair, overhaul, or refurbishing of commodities controlled by 1A607.e, .f, .g, .h, or .j or by USML Category XIV(f)	1B607.c
Tooling for powder metallurgy rotor component manufacture	9B009
Torpedo nets	8A620.e
Torquemeter assembly software	9D619.b.9
Torture, specially designed implements of	0A983
Touchpads	3A611.y.28
Tow-placement machines	1B001.g, 1B101.a
Towed acoustic hydrophone arrays	6A001.a.2.b
Toxic gas monitors and monitoring systems	2B351
Toxins	1C350, 1C351, 1C355 or 1C395
Trackballs	3A611.y.12
Tracking radar	6A008.1.1

Description	ECCN Citation
Tracking systems, precision	6A108.b.1
Tracking systems	6A008.l
Tractors and parts.....	9A990
Transceivers, radio.....	5A001.b.2 through 10
Transceivers, radio.....	5A991.b.6 or 7
Transcoders (translation encoders)	5A991.b Note a.6
Transducers, wall skin friction	9B008
Transducers, acoustic projectors.....	6A001.a.1.c
Transformers, electric	3A611.y.13
Transient recorders (Waveform digitizers).....	3A002.h or 3A992.g
Transistor test equipment, S-parameter measurement	3B002.a
Transistors, microwave.....	3A001.b.3, 3A611.d
Translation encoders (transcoders)	5A991.b Note a.6
Transmission fluids, automatic	1C980
Transmission equipment	5A991.b
Transmission equipment for Improvised Explosive Devices (IED).....	5A001.h
Transmissions for tracked combat vehicles	0A606.d
Transmit/receive or transmit modules, transmit/receive MMICs or transmit MMICs...3A001.b.12	
Transmit/receive or transmit module technology	3E611.b.2, 3E001
Transmultiplex equipment	5A991.b Note a.9
Transport, handling, activation, and launch equipment.....	9A115
Traveling wave tubes (TWTs), industrial	3A001.b.1.a
Tributyl phosphate	1C999.d
Triethanolamine	1C350.c.10
Triethanolamine hydrochloride.....	1C350.d.24
Triethyl phosphite	1C350.c.11
Triethylene glycol dinitrate (TEGDN).....	1C111.c.2
Triggered spark-gaps	3A228.b
Triggers, high voltage	3A999.c
Trimethyl phosphite	1C350.c.12
Tritium, compounds & mixtures.....	1C235
Tritium plant or facilities equipment	1B231.b
Tritium production recovery, extraction & concentration handling facilities or plant.....	1B231.a
Tritium targets for production of tritium and related development and production technology.....	1A231
Tubes, gas krytron	3A228.a
Tubes, vacuum sprytron	3A228.a
Tunable band-pass filters	3A001.b.5
Tunable lasers	6A005.c
Tunable lasers, solid state	6A005.c.1, c.2 or c.3

Description	ECCN Citation
Tungsten alloys	1C004
Tungsten alloy, parts	1C226
Tungsten carbide, parts	1C226
Tungsten & molybdenum metal & alloys	1C117
Tungsten, parts	1C226
Turbines for use in nuclear reactors	2A290.a
Turbines, aero gas engines, test software	9D004.b, 9D619
Turbines, gas aero engines	9A001, 9A619.a
Turbo prop engines	9A619.a
Turbocompound engines	9A101
Turboexpanders and turboexpander-compressors	1B232
Turbofan & turbojet engines, lightweight	9A101, 9A619
Turboprop engine systems specially designed for items controlled by 9A012	9A102.a
Turning machines for optical quality surfaces	2B992.a
Turning machines (CNC)	2B991.d.1
Turning machines	2B201.c
Turning machines (CNC)	2B001.a
TV cameras (radiation-hardened), or lenses therefor	6A203.d
TV cameras, radiation-hardened, not specified in 6A203	6A999.b
Two dimensional focal plane arrays	6A002.a.3
TWTs (Traveling Wave Tubes)	3A001.b.1.a
UAVs (non-military)	9A012.a
UAV (military) production facilities	9B610.c
Ultra high temperature ceramic composites	1C107.d.3
Ultrasonic test equipment for nuclear reactors	2A291.d
Underwater breathing apparatus, self-contained	8A992.h
Underwater cameras, photographic	8A002.d, e or f
Underwater camera equipment, n.e.s.	8A992.d
Underwater communications systems	5A001.b.1
Underwater ElectroMagnetic Receivers (UEMR)	6A006.e
Underwater ElectroMagnetic Receivers (UEMR) software	6D003.f.3 or f.4
Underwater electric field sensors	6A006.b
Underwater lights	8A992.j
Underwater noise reduction technology	8E002
Underwater (propeller) noise reduction software	8D002
Underwater propulsion equipment	8A992.j
Underwater rebreathing apparatus	8A620.f
Underwater robots, computer controlled	8A002.h
Underwater sonar navigation systems	7A008
Underwater systems or equipment and parts, not controlled by 8A002	8A992
Underwater television cameras	8A992.a.2

Description	ECCN Citation
Underwater vehicles, industrial	8A001
Underwater velocity measurement equipment.....	6A001.b
Underwater vessel positioning systems, acoustic	6A001.a.1.d
Underwater vision systems	8A002.d
Underwater vision systems	8A992.a
Unmanned aerial vehicles, not specified in 9A102	9A120, 9A610
Unmanned aerial vehicles and associated systems, production equipment.....	9B010, 9A610
Unmanned aerial vehicles, associated equipment, systems, and components	9A012.b, 9A610
Unmanned air vehicle systems (UAVs) Non-military.....	9A012.a
Unmanned submersible vehicle operation software	8D999
Unmanned tethered submersible vehicles.....	8A001.c
Unmanned untethered submersible vehicles.....	8A001.d
Uranium, depleted.....	1A290
Uranium titanium alloys	1C004
Urine collection bags/pads/cups/pumps for military aircraft.....	9A610.y.21
Vaccines and immunotoxins	1C991
Vacuum electronic devices	3A001.b
Vacuum furnaces	2B226
Vacuum furnaces	2B227
Vacuum induction furnaces	2B226
Vacuum induction furnace, power supplies.....	2B226
Vacuum melting, remelt & casting furnaces.....	2B227
Vacuum microelectronic device development/production technology.....	3E003.a
Vacuum pumps	2B231
Vacuum pumps	2B350.i
Vacuum pumps, bellows-sealed scroll-type	2B233
Vacuum tubes, electronic microwave	3A001.b.1
Vacuum sprytron tubes	3A228.a
Vacuum valves, piping, flanges, gaskets	2B999.k
Valves, austenitic stainless steel	2B999.n
Valves, bellows seal.....	2A226
Valves, bellows.....	2B350.g
Valves (check) for hydraulic and pneumatic systems in military aircraft	9A610.y.4
Valves, double-seal.....	2B350.g
Valves, of or lined with stainless steel, copper-nickel alloy or other alloy steel (not having the characteristics of valves controlled by 2B350.g)	2A992
Valves, diaphragm	2B350.g
Valves, monel	2B999.f
Valves, multiple seal incorporating a leak detection port.....	2B350.g
Valves, non-return (check).....	2B350.g
Valves, stainless steel.....	2B999.g

Description	ECCN Citation
Valves, vacuum.....	2B999.k
Vapor sterilizable freeze drying equipment.....	2B352.e
Variola virus.....	1C351.a.53
Vector processing unit technology.....	3E002
Vector processors/assemblies.....	4A003
Vehicle position determination software.....	6D103
Vehicles, “specially designed” for a military use.....	0A606.a
Vehicles, unarmed, off-road, and armored.....	0A606.b.1
Velocity interferometers (VISARs).....	6A225
Velocity measurement equipment, underwater.....	6A001.b
Venezuelan equine encephalitis virus.....	1C351.a.54
Ventilated full or half (protective clothing) suits.....	2B352.f.1
Verocytotoxin producing E. coli (VTEC).....	1C351.c.17
Verotoxin.....	1C351.d.13
Vesicular stomatitis virus.....	1C351.a.55
Vessels, austenitic stainless steel.....	2B999.n
Vessel positioning systems, acoustic.....	6A001.a.1.d
Vessel noise reduction equipment.....	8A002.o.3
Vessels, marine.....	8A001, 8A609, 8A620
Vessels, marine systems or equipment.....	8A992
Vessels, monel.....	2B999.f
Vessels, stainless steel.....	2B999.e
Vests, bulletproof & bullet resistant.....	1A005
Vibration test equipment, acoustic.....	9B006
Vibration test equipment, parts and components.....	9B990
Vibration test equipment using digital control techniques.....	2B116
Vibrio cholerae.....	1C351.c.21
Video cameras incorporating solid state sensors.....	6A003.b.1
Vinylidene fluoride copolymers, components of.....	1A001
virulans, fungi (Colletotrichum kahawae).....	1C354.b.1
Virus protection software, mass market.....	5D992
Viruses.....	1C351 or 1C353
Viruses, animal pathogens.....	1C351.a
Viruses, human pathogens.....	1C351.a or .b
Viruses, plant pathogens.....	1C354.c
Viscous software, 2D or 3D engine flow modeling.....	9D004.a
Viscumin (Viscum album lectin 1).....	1C351.d.17
Vision systems, underwater.....	8A992.a
Vision systems, underwater.....	8A002.d
Voice print identification and analysis equipment and parts.....	3A980
Volkensin.....	1C351.d.18

Description	ECCN Citation
Wafer handling systems, semiconductor	3B001.e
Wafer processing, semiconductor manufacture	3B001.e
Wafer probing equipment	3B992.b.3
Wafer production align and expose equipment	3B991.b.2.f
Wafers, semiconductor with function determined	3A001.a
Wafers, comprising multiple epitaxially grown layers	3C001
Wall skin friction transducers	9B008
War implement machinery, equipment, gear, and specially designed parts and accessories therefor.....	2B018
Water (deep) fording kits for ground vehicles	0A606.e
Water jet cutting machines (CNC).....	2B001.e.1.a
Water jet (pumpjet) propulsion systems	8A002.p
Waterplane area vessels (small).....	8E002.c.4
Water tanks (potable) and accessories for military aircraft	9A610.y.17
Water tanks (potable) and accessories for submersible vessels.....	8A620.y.7
Water tanks (potable) and accessories for surface vessels of war	8A609.y.7
Water tunnels, propulsion model acoustic field measurement	8B001
Water-hydrogen sulphide exchange tray columns	1B229
Wave division multiplex equipment	5A991.b.5
Waveform digitizers (Transient recorders).....	3A002.h
Wax pattern preparation equipment, ceramic shell	9B991.e
Weaving machines	1B001.c
Weight belts	8A992.i
Welders, MIG	2B999.d
Welders, E-beam.....	2B999.e
Welding machines, laser	2B999.c
Western equine encephalitis virus	1C351.a.56
Western red cedar, logs and timber.....	1C988
Wet-spinning equipment for refractory ceramics	1B101.c.3
Wet-spinning equipment for refractory ceramics	1B001.d.3
Wetsuits.....	8A992.i
Wide-swath bathymetric survey systems.....	6A001.a.1
Wigglers (free electron laser magnet) manufacturing or inspection equipment.....	6B995.a.1
Wind tunnel aero-model technology.....	9E003.b.1
Wind tunnel, control systems.....	9B005
Wind tunnels, usable for missiles	9B105
Winding machines, fiber optic gyro coil.....	7B003
Windows, glass for nuclear radiation shielding	1A227
Windows (ground vehicle), except those for armored vehicles	0A606.y.16
Windshield water and wiper systems for military aircraft.....	9A610.y.22
Wing folding system software	0D521 No. 3

Description	ECCN Citation
Wing folding system technology	9E003.j
Work stations, as computers having a CTP above 260 Mtops	4A003.b
X-ray converters.....	1A999.b
X-ray equipment for projection image transfer	3B991.b.2.g
X-ray generators, radiographic	3A201.c
X-ray machines, flash	3A999.c
X-ray (non planar) inspection equipment, rocket motors	9B007
Xanthomonas albilineans	1C354.a.1
Xanthomonas axonopodis pv. citri (Xanthomonas campestris pv, citri A) (Xanthomonas campestris pv. citri).....	1C354.a.2
Xanthomonas oryzae.....	1C354.a.3
Xanthomonas oryzae pv. oryzae (syn. Pseudomonas campestris pv. oryzae).....	1C354.a.3
Yellow fever virus.....	1C351.a.57
Yersinia pestis.....	1C351.c.22
Yttrium oxide (yttria) (Y ₂ O ₃), crucibles made or coated.....	2A225.a.8
Zinc germanium biphosphide	6C004.b.4
Zinc germanium diphosphide	6C004.b.4
Zinc germanium phosphide.....	6C004.b.4
Zinc selenide (ZnSe), substrate blanks	6C004.a
Zinc sulphide (ZnS), substrate blanks.....	6C004.a
Zirconium fluoride (ZrF ₄) glass	6C004.e
Zirconium metal particulate	1C111.a.2.a.1
Zirconium metal, alloy, compounds, or manufacturers	1C234
Zirconium oxide (zirconia) (ZrO ₂) made/coated crucibles.....	2A225.a.9
Zoonotic pathogens and “toxins”	1C351

Note: Prior to October 15, 2013, the CCL contained certain ECCNs that were only included as cross references to items subject to the export control regulations administered by the Nuclear Regulatory Commission. ECCNs formerly listed on the CCL that, as of October 15, 2013 were subject to the export licensing authority of the Nuclear Regulatory Commission at 10 CFR part 110 are: 0A001, 0B001, 0B002, 0B003, 0B004, 0B005, 0B006, 0C001, 0C002, 0C004, 0C005, 0C006, 0C201 and 1C012. See Section § 774.1(b) for additional information.