SCHEDULES

[F1SCHEDULE 3C U.K.

Regulation 21

[F2Defence and Security Goods and Defence and Security Technology]

Textual Amendments

- F1 Sch. 3C inserted (15.7.2022) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 11) Regulations 2022 (S.I. 2022/792), reg. 1(2), Sch. 3 (with reg. 13)
- F2 Sch. 3C heading substituted (29.10.2022) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 15) Regulations 2022 (S.I. 2022/1110), reg. 1(2)(b), Sch. 3 para. 8

PART 1 U.K. PRELIMINARY

Application to non-government controlled Ukrainian territory U.K.

1. Regulation 53A applies, subject to paragraph 2, in relation to all the goods and technology specified in Parts 2, 3 and 4.

CAS numbers U.K.

- **2.**—(1) For the purposes of this Schedule "CAS Number" when followed by a numerical sequence is a reference to the CAS Registry Numbers assigned to chemicals by the Chemical Abstracts Service
- (2) But regulation 53A applies to chemicals of the same structural formula (including hydrates) regardless of name or CAS Number.

PART 2 U.K.

Interception and monitoring goods and interception and monitoring technology

Interception and monitoring equipment U.K.

- 1. This Part applies to any goods which can perform any of the following functions (whether individually or as part of a system)—
 - (a) deep packet inspection;
 - (b) network interception, including associated systems management and data retention functions;
 - (c) radio frequency monitoring, including associated processing or examination;
 - (d) network and satellite jamming;

1

- (e) remote infection;
- (f) speaker recognition, including associated processing functions;
- (g) IMSI, MSISDN, IMEI and TMSI interception and monitoring;
- (h) tactical SMS, GSM, GPS, GPRS, UMTS, CDMA, and PSTN interception and monitoring;
- (i) DHCP, SMTP and GTP information interception and monitoring;
- (j) pattern recognition and pattern profiling;
- (k) remote forensics;
- (1) semantic processing;
- (m) WEP and WPA code breaking;
- (n) interception of VoIP (including proprietary and standard protocols).
- **2.** Any software which can perform any of the functions described in paragraph 1(a) to (n) (whether individually or as part of a system).

Other software and other technology U.K.

3. Any software or other technology which is specially designed for the development, production or use of any goods or software described in paragraph 1 or 2.

Interpretation U.K.

4. For the purposes of this Part, the following terms have the meaning given to them in the Dual-Use Regulation—

```
"development";
"production";
"software";
"technology";
"use".
```

PART 3 U.K.

Internal repression goods and internal repression technology

Firearms and related goods U.K.

- 1. Firearms, ammunition and related accessories, as follows—
 - (a) firearms;
 - (b) ammunition specially designed for firearms;
 - (c) weapon-sights.
- **2.** Simulators for training persons to use firearms.
- **3.** Bombs and grenades.

[F3Other related goods U.K.

3A.—(1) Any goods within commodity codes 9303 and 9304 not covered by paragraphs 1 to 3 above.

(2) Paragraph 1 of Schedule 3 applies for the purposes of interpreting sub-paragraph (1).]

Textual Amendments

F3 Sch. 3C Pt. 3 para. 3A inserted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), 22(13)

Vehicles U.K.

- **4.**—(1) Subject to sub-paragraph (3), the following types of vehicles—
 - (a) vehicles equipped with a water cannon, specially designed or modified for the purpose of riot control;
 - (b) vehicles specially designed or modified to be electrified to repel boarders;
 - (c) vehicles specially designed or modified to remove barricades, including construction equipment with ballistic protection;
 - (d) vehicles specially designed for the transport or transfer of prisoners or detainees;
 - (e) vehicles specially designed to deploy mobile barriers.
- (2) Components for the vehicles specified in sub-paragraphs (1)(a) to (e) that have been designed for the purposes of riot control.
- (3) Vehicles that might otherwise fall within sub-paragraph (1)(a) to (e) are not internal repression goods if they are specially designed for the purposes of fire-fighting.
 - (4) For the purposes of this paragraph, "vehicle" includes a trailer.

Explosive substances and related goods U.K.

- **5.**—(1) Equipment and devices specially designed to initiate explosions by electrical or non-electrical means, including—
 - (a) firing sets;
 - (b) detonators; (codes for electric detonators and detonating caps);
 - (c) igniters;
 - (d) boosters;
 - (e) detonating cord.
 - (2) Components that have been specially designed for any thing mentioned in sub-paragraph (1).
- (3) Sub-paragraphs (1) and (2) do not apply to any thing that has been specially designed for a specific commercial use.
- (4) For the purpose of sub-paragraph (3), a "specific commercial use" means the actuation or operation by explosive means of other equipment or devices the function of which is not the creation of explosions, including—
 - (a) car air-bag inflaters;
 - (b) electric-surge arresters;
 - (c) fire sprinkler actuators.
 - (5) Linear cutting explosive charges.
 - (6) The following explosives and related substances—
 - (a) amatol;
 - (b) nitrocellulose (containing more than 12.5 % nitrogen);

- (c) nitroglycol;
- (d) pentaerythritol tetranitrate (PETN);
- (e) picryl chloride;
- (f) 2,4,6-trinitrotoluene (TNT).

Other goods U.K.

- **6.**—(1) Subject to sub-paragraph (2), the following equipment designed for the protection of a person—
 - (a) body armour providing ballistic or stabbing protection or both;
 - (b) helmets providing ballistic or fragmentation protection, or both, including anti-riot helmets:
 - (c) anti-riot shields and ballistic shields.
 - (2) Sub-paragraph (1) does not apply to—
 - (a) any thing specially designed to protect persons for the following purposes—
 - (i) participation in competitive sport;
 - (ii) ensuring safety at work;
 - (b) any thing mentioned in sub-paragraph (1)(a) or (b) when accompanying a person for that person's own protection.
 - 7. Night vision equipment.
 - 8. Thermal imaging equipment.
 - 9. Image intensifier tubes.
 - 10. Razor barbed wire.
 - 11. The following types of knives—
 - (a) knives that are designed for use by military personnel (military knives);
 - (b) knives that are designed for use as a weapon for inflicting injury (combat knives);
 - (c) bayonets with blade lengths in excess of 10 cm.
- **12.** Law enforcement striking weapons, including saps, police batons, side handle batons, tonfas, sjamboks, and whips.
 - 13.—(1) Handcuffs, straitjackets and specially designed components and accessories.
 - (2) Sub-paragraph (1) does not apply to—
 - (a) medical devices that are equipped to restrain patient movement during medical procedures;
 - (b) devices which confine memory impaired patients to appropriate medical facilities.
- **14.** Technology exclusively for the development or production of equipment controlled by paragraph 15.

15.—[

F⁴(1)] Chemical agents, including tear gas formulation containing 1 per cent. or less of orthochlorobenzalmalononitrile (CS), or 1 per cent. or less of chloroacetophenone (CN), except in individual containers with a net weight of 20 grams or less; liquid pepper except when packaged in individual containers with a net weight of 3 ounces (85.05 grams) or less; smoke bombs; non-irritant smoke flares, canisters, grenades and charges; and other pyrotechnic articles having dual military and commercial use, and specially designed components thereof.

F5(2) Other irritating chemical substances, and mixtures thereof containing at least 0.3 % by weight of the active substance, as follows, except where the material is incorporated in a medical product—

Commodity Code	Description
2934 9990	Dibenzo[b,f][1,4]oxazepine (CR) (CAS 257-07-8)
2939 7990	8-Methyl-N-vanillyl-trans-6-nonenamide (capsaicin) (CAS 404-86-4)
2939 7990	8-Methyl-N-vanillylnonamide (dihydrocapsaicin) (CAS 19408-84-5)
2939 7990	N-Vanillyl-9-methyldec-7-(E)-enamide (homocapsaicin) (CAS 58493-48-4)
2939 7990	N-Vanillyl-9-methyldecanamide (homodihydrocapsaicin) (CAS 20279-06-5)
2939 7990	N-Vanillyl-7-methyloctanamide (nordihydrocapsaicin) (CAS 28789-35-7)
2934 9990	4-Nonanolylmorpholine (MPA) (CAS 5299-64-9)
2924 2970	Cis-4-acetylaminodicyclohexylmethane (CAS 37794-87-9)
2921 2900	N,N'-Bis(isopropyl)ethylenediimine
2921 2900	N,N'-Bis(tert-butyl)ethylenediimine

Note: For the purposes of paragraph (2) which precedes this table, "medical product" means—

- (1) a pharmaceutical formulation designed for human administration in the treatment of medical conditions, and
- (2) prepackaged for distribution as a clinical or medical product.]

Textual Amendments

- F4 Sch. 3C Pt. 3 para. 15 renumbered as Sch. 3C Pt. 3 para. 15(1) (21.4.2023) by The Russia (Sanctions) (EU Exit) (Amendment) Regulations 2023 (S.I. 2023/440), regs. 1(2), 14(5)(a)
- F5 Sch. 3C Pt. 3 para. 15(2) inserted (21.4.2023) by The Russia (Sanctions) (EU Exit) (Amendment) Regulations 2023 (S.I. 2023/440), regs. 1(2), 14(5)(b)
- **16.** Fingerprinting powders, dyes, and inks.

Textual Amendments

- F4 Sch. 3C Pt. 3 para. 15 renumbered as Sch. 3C Pt. 3 para. 15(1) (21.4.2023) by The Russia (Sanctions) (EU Exit) (Amendment) Regulations 2023 (S.I. 2023/440), regs. 1(2), 14(5)(a)
- F5 Sch. 3C Pt. 3 para. 15(2) inserted (21.4.2023) by The Russia (Sanctions) (EU Exit) (Amendment) Regulations 2023 (S.I. 2023/440), regs. 1(2), **14(5)(b)**

Production equipment U.K.

17. Any equipment which is specially designed or modified for the development or for one or more of the production phases of any item mentioned in paragraphs 1 to 13 of this Part.

Software and technology U.K.

18. Any software which is specially designed for the simulators mentioned in paragraph 2.

19. Any technology which is specially designed for the development, production or use of any item mentioned in paragraphs 1 to 11.

Interpretation U.K.

- **20.**—(1) In this Part, "firearm" means any portable barrelled weapon that expels, is designed to expel or may be converted to expel, a shot, bullet or projectile by the action of a combustible propellant.
- (2) For the purposes of this Schedule, the following terms have the meaning given to them in Annex I of the Dual-Use Regulation—
 - "development";
 "production";
 "software";
 "technology";
 "use".

PART 4 U.K.

Chemicals and equipment

Chemicals

Chemical Name	CAS Number	Regulation 53A applies?
Aluminium chloride	(7446-70-0)	
[F6Ammonia	(7664-41-7)]	
Dichloromethane	(75-09-2)	
N,N-Dimethylaniline	(121-69-7)	
Isopropyl bromide	(75-26-3)	
Isopropyl ether	(108-20-3)	
Monoisopropylamine	(75-31-0)	
Potassium Bromide	(7758-02-3)	
Pyridine	(110-86-1)	
Sodium bromide	(7647-15-6)	
Sodium metal	(7440-23-5)	
Tributylamine	(102-82-9)	
Triethylamine	(121-44-8)	
Trimethylamine	(75-50-3)	
Diethylenetriamine	(111-40-0)	
Butyrylcholinesterase (BCHE)	Not Applicable	Yes
Pyridostigmine bromide	(101-26-8)	

Chemical Name	CAS Number	Regulation 53A applies?
Obidoxime chloride	(114-90-9)	
Acetylene	(CAS 74-86-2)	
Acetone	(CAS 67-64-1)	
Antimony	(CAS 7440-36-0)	
Arsenic	(CAS 7440-38-2)	
Arsenic trioxide	(CAS 1327-53-3)	
Bis(2-chloroethyl)ethylamine hydrochloride	(CAS 3590-07-6)	
Bis(2-chloroethyl)methylamine hydrochloride	(CAS 55-86-7)	
Benzil	(CAS 134-81-6)	
Benzaldehyde	(CAS 100-52-7)	
Benzoin	(CAS 119-53-9)	
2-bromochloroethane	(CAS 107-04-0)	
Chlorine	(CAS 7782-50-5)	
Diethyl ether	(CAS 60-29-7)	
Dimethyl ether	(CAS 115-10-6)	
Dimethylaminoethanol	(CAS 108-01-0)	
Dicyclohexylamine (DCA)	(CAS 101-83-7)	
Ethylene	(CAS 74-85-1)	
Ethylene dichloride	(CAS 107-06-2)	
2-methoxyethanol	(CAS 109-86-4)	
Ethyl bromide	(CAS 74-96-4)	
Ethyl chloride	(CAS 75-00-3)	
Ethylamine	(CAS 75-04-7)	
Ethylene oxide	(CAS 75-21-8)	
Fluorapatite	(CAS 1306-05-4)	
Hexamine	(CAS 100-97-0)	Yes
Hydrogen sulfide	(CAS 7783-06-4)	
Isocyanatomethane	(CAS 624-83-9)	
Isopropanol, 95% concentration or greater	(CAS 67-63-0)	
Mandelic acid	(CAS 90-64-2)	
Methylamine	(CAS 74-89-5)	

Chemical Name	CAS Number	Regulation 53A applies?
Methyl bromide	(CAS 74-83-9)	
Methyl chloride	(CAS 74-87-3)	
Methyl iodide	(CAS 74-88-4)	
Methylmercaptan	(CAS 74-93-1)	
Monoethylene Glycol (MEG)	(CAS 107-21-1)	
Nitromethane	(CAS 75-52-5)	
Oxalyl chloride	(CAS 79-37-8)	
Pieric acid	(CAS 88-89-1)	
Potassium sulfide	(CAS 1312-73-8)	
Potassium thiocyanate	(CAS 333-20-0)	
Quinaldine	(CAS 91-63-4)	
Thiophosphoryl chloride	(CAS 3982-91-0)	
Tributylphosphite	(CAS 102-85-2)	
Triisobutylphosphite	(CAS 1606-96-8)	
Tris(2-chloroethyl)amine hydrochloride	(CAS 817-09-4)	
Sodium hypochlorite	(CAS 7681-52-9)	
Sulfur trioxide	(CAS 7446-11-9)	
White/yellow phosphorus	(CAS 12185-10-3, 7723-14-0)	
Mercury	(7439#97#6)	
Barium chloride	(10361#37#2)	
Sulphuric acid, with a concentration by weight of 90% or greater	(7664#93#9)	
3,3#dimethyl#1#butene	(558#37#2)	
2,2#dimethylpropanal	(630#19#3)	
2,2#dimethylpropylchloride	(753#89#9)	
2#methylbutene	(26760#64#5)	
2#chloro#3#methylbutane	(631#65#2)	
2,3#dimethyl#2,3#butanediol	(76#09#5)	
2#methyl#2#butene	(513#35#9)	
Butyl lithium	(109#72#8)	
Bromo(methyl)magnesium	(75#16#1)	
Formaldehyde	(50#00#0)	

Chemical Name	CAS Number	Regulation 53A applies?
Diethanolamine	(111#42#2)	
Dimethylcarbonate	(616#38#6)	
Methyldiethanolamine hydrochloride	(54060#15#0)	
Methanol	(67#56#1)	
Ethanol	(64#17#5)	Yes
1#butanol	(71#36#3)	
2#butanol	(78#92#2)	
Iso#butanol	(78#83#1)	
Tert#butanol	(75#65#0)	
Cyclohexanol	(108#93#0)	
Diethylamine hydrochloride	(660#68#4)	
Diisopropylamine hydrochloride	(819#79#4)	
3#Quinuclidinone hydrochloride	(1193#65#3)	
3#Quinuclidinol hydrochloride	(6238#13#7)	
(R)#3# Quinuclidinol hydrochloride	(42437#96#7)	
N,N#Diethylaminoethanol hydrochloride	(14426#20#1)	
Acetyl-alpha-methylfentanyl	101860-00-8	
Alfentanil	71195-58-9	
Alpha-methylfentanyl	79704-88-4	
Alpha-methylthiofentanyl	103963-66-2	
Beta-hydroxyfentanyl	78995-10-5	
Beta-hydroxy-3-methylfentanyl	78995-14-9	
Fentanyl	437-38-7	
3-methylfentanyl	42045-86-3	
3-methylthiofentanyl	86052-04-2	
Para-fluorofentanyl	90736-23-5	
Remifentanil	132875-61-7	
Sufentanil	56030-54-7	
Thiofentanyl	60771-38-2	
Acryloylfentanyl (Acrylfentanyl)	82003-75-6	
Carfentanil	59708-52-0	

Chemical Name	CAS Number	Regulation 53A applies?
4-Fluoroisobutyrfentanyl (4-FIBF, pFIBF)	244195-32-2	
Furanyl fentanyl	101345-66-8	
Ocfentanil	101343-69-5	
Tetrahydrofuranyl fentanyl (THF-F)	2142571-01-3	
Cyclopropylfentanyl	1169-68-2	
Methoxyacetylfentanyl	101345-67-9	
Orthofluorofentanyl	910616-29-4	
Parafluorobutyrylfentanyl	244195-31-1	
Crotonylfentanyl	760930-59-4	
Valerylfentanyl	122882-90-0	
4-Anilino- <i>N</i> -phenethylpiperidine (ANPP)	21409-26-7	
<i>N</i> -Phenethyl-4-piperidone (NPP)	39742-60-4	
Dialkyl(≤C10) chlorophosphates	N/A	
Dialkyl(≤C10) fluorophosphates	N/A	
N,N- Methylisopropylacetamidine	1339185-57-7	
N,N-Methylethylacetamidine	1339632-40-4	
N,N-Ethylisopropylacetamidine	1339156-10-3	
N,N-Methylpropylacetamidine	1344238-28-3	
N,N-Ethylpropylacetamidine	1339737-43-7	
N,N- Isopropylpropylacetamidine	1341389-98-7	
N,N-Methylethylpropanamidine	1339424-26-8	
N,N- Ethylisopropylpropanamidine	1344354-09-1	
N,N- Methylpropylpropanamidine	1340216-25-2	
N,N-Ethylpropylpropanamidine	1341493-60-4	
N,N- Isopropylpropylpropanamidine	1343225-93-3	
N,N- Methylisopropylpropanamidine	1339042-55-5	
N,N-Methylethylbutanamidine	1341049-51-1	
N,N-Methylpropylbutanamidine	1343721-02-7	

N,N-Ethylpropylbutanamidine N,N-Isopropylpropylbutanamidine N,N-Methylisopropylbutanamidine N,N-Ethylisopropylbutanamidine N,N-Ethylisopropylbutanamidine N,N-Methylethylisobutanamidine N,N-Methylethylisobutanamidine N,N-Ethylpropylisobutanamidine N,N-Methylpropylisobutanamidine N,N-Methylpropylisobutanamidine N,N-Methylpropylisobutanamidine N,N-Methylpropylisobutanamidine	
Isopropylpropylbutanamidine N,N- Methylisopropylbutanamidine N,N- Ethylisopropylbutanamidine N,N- Methylethylisobutanamidine N,N- Ethylpropylisobutanamidine N,N- Ethylpropylisobutanamidine N,N- Methylpropylisobutanamidine N,N- Methylpropylisobutanamidine N,N- Methylpropylisobutanamidine	
Methylisopropylbutanamidine N,N- Ethylisopropylbutanamidine N,N- Methylethylisobutanamidine N,N- Ethylpropylisobutanamidine N,N- Methylpropylisobutanamidine N,N- Methylpropylisobutanamidine N,N- Methylpropylisobutanamidine	
Ethylisopropylbutanamidine N,N- Methylethylisobutanamidine N,N- Ethylpropylisobutanamidine N,N- Methylpropylisobutanamidine 1342365-47-2 1342566-58-8 1342270-21-6	
Methylethylisobutanamidine N,N- Ethylpropylisobutanamidine N,N- Methylpropylisobutanamidine 1342270-21-6 1342270-21-6	
Ethylpropylisobutanamidine N,N- Methylpropylisobutanamidine 1342270-21-6	
Methylpropylisobutanamidine	
N,N- Isopropylpropylisobutanamidine	
N,N- Methylisopropylisobutanamidine 1341992-96-8	
N,N- Ethylisopropylisobutanamidine	
N,N-Dimethylacetamidine 1801188-12-4 hydrobromide	
N,N-Dimethylacetamidine 2909-15-1 hydrochloride	
N,N-Diethylacetamidine hydrochloride 91400-32-7	
N,N-Diethylacetamidine hydrobromide 78053-54-0	
N,N-Dimethylpropanamidine dihydrochloride 79972-73-9	
N,N-Dimethylpropanamidine hydrochloride 56776-15-9	
I ^{F7} Calcium carbide 75-20-7	
Carbon monoxide 630-08-0	
Monoethyleneglycol 107-21-1	
Sulphur 7704-34-9	
Sulphur dioxide 7446-09-5]	

- **F6** Words in Sch. 3C Pt. 4 Table inserted (21.4.2023) by The Russia (Sanctions) (EU Exit) (Amendment) Regulations 2023 (S.I. 2023/440), regs. 1(2), 14(5)(c)
- **F7** Words in Sch. 3C Pt. 4 Table inserted (16.12.2022) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 17) Regulations 2022 (S.I. 2022/1331), regs. 1(2)(b), **20(2**)

Equipment

Item	Regulation 53A applies?
Floor-mounted fume hoods (walk-in style) with a minimum nominal width of 2.5 metres.	
Full face-mask air-purifying and air-supplying respirators.	Yes
Class II biosafety cabinets and glove boxes.	
Batch centrifuges with a rotor capacity of 4 L or greater, usable with biological materials.	
Fermenters with an internal volume of $10 L - 20 L$, usable with biological materials.	Yes
Reaction vessels, reactors, agitators, heat exchangers, condensers, pumps (including single seal pumps), valves, storage tanks, containers, receivers, and distillation or absorption columns that meet AG performance parameters, regardless of their materials of construction.	Yes
Conventional or turbulent air-flow cleanair rooms and self-contained fan-HEPA filter units that may be used for P3 or P4 (BSL 3, BSL 4, L3, L4) containment facilities.	
Vacuum pumps with a manufacturer's specified maximum flow-rate greater than 1 m³/h (under standard temperature and pressure conditions), casings (pump bodies), preformed casing-liners, impellers, rotors, and jet pump nozzles designed for such pumps, in which all surfaces that come into direct contact with the chemicals being processed are made from controlled materials.	
Laboratory equipment, including parts and accessories for such equipment, for the	

Item	Regulation 53A applies?
analysis or detection, destructive or non- destructive, of chemical substances.	
Whole chlor-alkali electrolysis cells – mercury, diaphragm, and membrane.	
Titanium electrodes (including those with coatings produced from other metal oxides), specially designed for use in chlor-alkali cells.	
Nickel electrodes (including those with coatings produced from other metal oxides), specially designed for use in chlor-alkali cells.	
Bipolar titanium nickel electrodes (including those with coatings produced from other metal oxides), specially designed for use in chlor-alkali cells.	
Asbestos diaphragms specially designed for use in chlor-alkali cells.	
Fluoropolymer based diaphragms specially designed for use in chlor-alkali cells.	
Fluoropolymer based ion exchange membranes specially designed for use in chlor-alkali cells.	
Compressors specially designed to compress wet or dry chlorine, regardless of material of construction.	
Microwave reactors—	Yes
Machinery, plant or laboratory equipment, whether or not electrically heated, for the treatment of materials by a process involving a change of temperature such as heating 84 19 89 98 00.	
Microreactors—	
Instruments and apparatus for physical or chemical analysis: 90 27 89 90 00 BE (classified similar item to 90 27 80 17 90, now invalid due to code changes), for similar microreactors.	
Solid & Liquid Aerosol generating equipment—	
Mechanical appliances (whether or not hand-operated), for projecting, dispersing	

Item	Regulation 53A applies?
or spraying liquids or powders: 84 24 89	
70 00.	

Laboratory equipment

Item	Regulation 53A applies?
Next-generation (second generation) and third generation DNA and RNA sequencers	
PCR Machines and qPCR (real-time) PCR machines	Yes
Solid phase DNA and RNA synthesisers	
Peptide synthesizers	
Automated nucleic acid extraction systems	
Ultracentrifuges	
Probe sonicators	
Fast protein liquid chromatography (FPLC) systems (medium pressure chromatography systems)	
Cell disruptors and tissue homogenisers, with a volume of 1 L or greater	

Associated Parts and Consumables

Item		Regulation 53A applies?
Next generation (second generation) and third generation DNA and RNA sequencers		Yes
	Library and template preparation kits	
	Cluster generation kits	Yes
	Flow cells	Yes
PCR Machines and qPCR (real-time) PCR machines		Yes
Solid phase DNA and RNA synthesisers	Nucleoside phosphoramidites	
	Columns	
	Solid support resin	Yes
	Reagent kits	Yes
	Synthesis reagents	Yes
Peptide synthesizers	Fmoc and T-Boc protected amino acids	
	Resins	Yes
	Synthesis reagents	Yes
	14	

Document Generated: 2024-06-22

Changes to legislation: There are currently no known outstanding effects for the The Russia (Sanctions) (EU Exit) Regulations 2019, SCHEDULE 3C. (See end of Document for details)

Item Regulation 53A applies?

Automated nucleic acid extraction systems Reagents Yes

Rotor adapters

Ultracentrifuges Ultracentrifuge rotors with total

capacity 1 L or greater

Probe sonicators Sonicator probes 25mm over

diameter

High volume (1 L or greater) sonicator continuous flow cell

Fast protein liquid chromatography (FPLC) FPLC columns systems (medium pressure chromatography

systems)

Reagents Yes

Cell disruptors and tissue homogenisers

Other related items

Regulation 53A applies? Item 0B999 Specific processing equipment as follows: Yes

a. Ring magnets.

b. Hot cells.

c. Glove boxes suitable for use with radioactive materials.

0D999 Specific software, as follows:

- a. Software for neutronic calculations/modelling;
- b. Software for radiation transport calculations/modelling;
- c. Software for hydrodynamic calculations/modelling. Yes

1A995 Protective and detection equipment as follows and specially designed components therefor.

- a. Personal radiation monitoring dosimeters;
- b. Equipment limited by design or function to protect against hazards specific to civil industries, such as mining, quarrying, agriculture, pharmaceuticals, medical, veterinary, environmental, waste management, or to the food industry.

Note: This entry does not control items for protection against chemical or biological agents that are consumer goods, packaged for retail sale or personal use, or medical products, such as latex exam gloves, latex surgical gloves, liquid disinfectant soap, disposable surgical drapes, surgical gowns, surgical foot covers, and surgical masks.

Item

Regulation 53A applies?

1A999 Specific processing equipment as follows:

Radiation detection, monitoring and measurement equipment

Radiographic detection equipment such as x-ray Yes converters, and storage phosphor image plates.

1C991 Vaccines, immunotoxins, medical products, diagnostic and food testing kits, as follows.

Technical note:- For the purpose of this entry, 'immunotoxins' are monoclonal antibodies linked to a toxin with the intention of destroying a specific target cell while leaving adjacent cells intact. For the purpose of this entry, "medical products" are: (1) pharmaceutical formulations designed for testing and human (or veterinary) administration in the treatment of medical conditions, (2) prepackaged for distribution as clinical or medical products. For the purpose of this entry, "diagnostic and food testing kits" are specifically developed, packaged and marketed for diagnostic or public health purposes. For the purpose of this entry, "vaccine" is defined as a medicinal (or veterinary) product in a pharmaceutical formulation that is intended to stimulate a protective immunological response in humans or animals in order to prevent disease in those to whom or to which it is administered.

Technical Note: For purposes of the controls described in this entry 'toxins' refers to those toxins, or their subunits, controlled under 1C351.d of Annex I of the Dual-Use Regulation

- a. Vaccines containing, or designed for use against, items Yes controlled by 1C351, 1C353 or 1C354 of Annex I of the Dual-Use Regulation;
- b. Immunotoxins containing items controlled by 1C351.d Yes of Annex I of the Dual-Use Regulation;
- c. Medical products that contain any of the following:

 Yes
- c.1. Toxins controlled by 1C351.d of Annex I of the Dual-Yes Use Regulation (*except for* botulinum toxins controlled by [F81C351.d.1] of Annex I of the Dual-Use Regulation, conotoxins controlled by [F91C351.d.3], of Annex I of the Dual-Use Regulation or items controlled for CW reasons under 1C351.d.11 or .d.12 of Annex I of the Dual-Use Regulation); or
- c.2. Genetically modified organisms or genetic elements Yes controlled by 1C353.a.3 of Annex I of the Dual-Use Regulation (*except for* those that contain, or code for, botulinum toxins controlled by [F101C351.d.1] of Annex I

Item Regulation 53A applies?

of the Dual-Use Regulation or conotoxins controlled by [F111C351.d.3] of Annex I of the Dual-Use Regulation);

- d. Medical products not controlled by 1C991.c that contain Yes any of the following:
- d.1. Botulinum toxins controlled by [F121C351.d.1] of Yes Annex I of the Dual-Use Regulation;
- d.2. Conotoxins controlled by [F131C351.d.3] of Annex I of Yes the Dual-Use Regulation; or
- d.3. Genetically modified organisms or genetic elements Yes controlled by 1C353.a.3 of Annex I of the Dual-Use Regulation that contain, or code for, botulinum toxins controlled by [F141C351.d.1] of Annex I of the Dual-Use Regulation or conotoxins controlled by [F151C351.d.3] of Annex I of the Dual-Use Regulation;
- e. Diagnostic and food testing kits containing items Yes controlled by 1C351.d of Annex I of the Dual-Use Regulation.

Textual Amendments

- **F8** Word in Sch. 3C Pt. 4 substituted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(15)(a)(i)**
- F9 Word in Sch. 3C Pt. 4 substituted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), 22(15)(a)(ii)
- **F10** Word in Sch. 3C Pt. 4 substituted (15.12.2023) by virtue of The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(15)(b)(i)**
- **F11** Word in Sch. 3C Pt. 4 substituted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(15)(b)(ii)**
- **F12** Word in Sch. 3C Pt. 4 substituted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(15)(c)**
- **F13** Word in Sch. 3C Pt. 4 substituted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(15)(d)**
- F14 Word in Sch. 3C Pt. 4 substituted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), 22(15)(e)(i)
- **F15** Word in Sch. 3C Pt. 4 substituted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(15)(e)(ii)**

1C995 Mixtures that contain chemicals controlled by 1C350 or 1C450 of Annex 1 of the Dual-Use Regulation and medical, analytical, diagnostic, and food testing kits that contain chemicals controlled by 1C350, as follows:

For the purpose of this entry, "medical, analytical, diagnostic, and food testing kits" are prepackaged materials of defined composition that are specifically developed, packaged and marketed for medical, analytical, diagnostic, or public health purposes.

- a. Mixtures containing the following concentrations of precursor chemicals controlled by 1C350 of Annex I of the Dual-Use Regulation:
- a.1. Mixtures containing [F1630] per cent. or less, by weight, of any of the following—

Chemical Name	CAS Number	Regulation 53A applies?
Arsenic trichloride;	7784-34-1	
Benzilic acid;	76-93-7	
Diethyl ethylphosphonate;	78-38-6	
Diethyl methylphosphonate;	683-08-9	
Diethyl methylphosphonite	15715-41-0	
Diethyl-N,N- dimethylphosphoroamidate;	2404-03-7	
N,N- Diisopropylaminoethanethiol hydrochloride;	41480-75-5	
N,N-Diisopropyl-beta- aminoethane thiol;	5842-07-9	
N,N-Diisopropyl-beta- aminoethanol;	96-80-0	
N,N-Diisopropyl-beta- aminoethyl chloride;	96-79-7	
N,N-Diisopropyl-beta- aminoethyl chloride hydrochloride;	4261-68-1	
Dimethyl ethylphosphonate;	6163-75-3	
Dimethyl methylphosphonate;	756-79-6	
N,N-dimethylamino- phosphoryl dichloride;	677-43-0	
Ethyl phosphonous dichloride [Ethyl phosphinyl dichloride];	1498-40-4	
Ethyl phosphonus difluoride [Ethyl phosphinyl difluoride];	430-78-4	
Ethyl phosphonyl dichloride;	1066-50-8	
Methylphosphonic acid;	993-13-5	
Methylphosphonothioic dichloride.	676-98-2	
Pinacolyl alcohol;	464-07-3	
3-Quinuclidinol;	1619-34-7	
Thiodiglycol.	111-48-8	

F16 Word in Sch. 3C Pt. 4 substituted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(16)(a)**

a.2. Mixtures containing [F1730 per cent. or less], by weight, of:

Textual Amendments

F17 Words in Sch. 3C Pt. 4 substituted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), 22(16)(b)

a.2.a. Any of the following—

Chemical Name	CAS Number	Regulation 53A applies?
Diethyl phosphite;	762-04-9	
Dimethyl phosphite (dimethyl hydrogen phosphite);	868-85-9	
Ethyldiethanolamine;	139-87-7	
Phosphorus oxychloride;	10025-87-3	
Phosphorus pentachloride;	10026-13-8	
Phosphorus trichloride;	7719-12-2	
Sulfur dichloride;	10545-99-0	
Sulfur monochloride;	10025-67-9	
Thionyl chloride;	7719-09-7	
Triethanolamine;	102-71-6	
Triethyl phosphite;	122-52-1	
Trimethyl phosphite.	121-45-9	

or

a.2.b. Any of the following single precursor chemicals—

Chemical Name	CAS Number	Regulation 53A applies?
Ammonium hydrogen fluoride [F18 or ammonium bifluoride];	1341-49-7	
2-Chloroethanol;	107-07-3	
Diethylamine;	109-89-7	
N,N-Diethylaminoethanol;	100-37-8	
Diethyl chlorophosphite;	589-57-1	
O,O-Diethyl phosphorodithioate;	298-06-6	
O,O-Diethyl phosphorothioate;	2465-65-8	
Di-isopropylamine;	108-18-9	
Dimethylamine;	124-40-3	
Dimethylamine hydrochloride;	506-59-2	

Chemical Name	CAS Number	Regulation 53A applies?
Ethyl chlorofluorophosphate;	762-77-6	
Ethyl dichlorophosphate;	1498-51-7	
Ethyl difluorophosphate;	460-52-6	
Hydrogen fluoride;	7664-39-3	
3-Hydroxyl-1- methylpiperidine;	3554-74-3	
Methyl benzilate;	76-89-1	
Methyl chlorofluorophosphate;	754-01-8	
Methyl dichlorophosphate;	677-24-7	
Methyl difluorophosphate;	22382-13-4	
N,N Diethylacetamidine;	14277-06-6	
N,N-Diethylbutanamidine;	53510-30-8	
N,N-Diethylformamidine;	90324-67-7	
N,N Diethylisobutanamidine;	1342789-47-2	
N,N-Diethylpropanamidine;	84764-73-8	
N,N-Diisopropylbutanamidine;	1315467-17-4	
N,N-Diisopropylformamidine;	857522-08-8	
N,N-Dimethylacetamidine;	2909-14-0	
N,N-Dimethylbutanamidine;	1340437-35-5	
N,N-Dimethylformamidine;	44205-42-7	
N,N- Dimethylisobutanamidine;	321881-25-8	
N,N-Dimethylpropanamidine;	56776-14-8	
N,N-Dipropylacetamidine;	1339586-99-0	
N,N-Dipropylbutanamidine;	1342422-35-8	
N,N-Dipropylformamidine;	48044-20-8	
N,N-Dipropylisobutanamidine;	1342700-45-1	
N,N-Dipropylpropanamidine;	1341496-89-6	
Phosphorus pentasulfide;	1314-80-3	
Pinacolone;	75-97-8	
Potassium bifluoride;	7789-29-9	
Potassium cyanide;	151-50-8	
Potassium fluoride;	7789-23-3	
3-Quinuclidone;	3731-38-2	
Sodium bifluoride;	1333-83-1	

Chemical Name	CAS Number	Regulation 53A applies?
Sodium cyanide;	143-33-9	
Sodium fluoride;	7681-49-4	
Sodium hexafluorosilicate;	16893-85-9	
Sodium sulfide;	1313-82-2	
Triethanolamine hydrochloride;	637-39-8	
Tri-isopropyl phosphite.	116-17-6	

F18 Words in Sch. 3C Pt. 4 inserted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(16)(c)**

- b. Mixtures containing the following concentrations of toxic or precursor chemicals controlled by 1C450 of Annex I of the Dual-Use Regulation—
- b.1. Mixtures containing [F1930 per cent. or less, by weight, of any single CWC Schedule 2] chemicals controlled by 1C450.a.2, 1C450.b1, 1C450.b2, 1C450.b.3, 1C450.b.4, 1C450.b.5 or 1C450.b.6 of Annex I of the Dual-Use Regulation;

Textual Amendments

F19 Words in Sch. 3C Pt. 4 substituted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(16)(d)**

b.1.a. F20...

Textual Amendments

F20 Words in Sch. 3C Pt. 4 omitted (15.12.2023) by virtue of The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(16)(e)**

b.1.b. F20...

b.2. Mixtures containing [F2130 per cent. or less], by weight, of any single CWC Schedule 3 chemical controlled by 1C450.a.4, 1C450.a.5, 1C450.a.6, 1C450.a.7, 1C450.b.8, of Annex I of the Dual-Use Regulation.

Textual Amendments

F21 Words in Sch. 3C Pt. 4 substituted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(16)(f)**

c. "Medical, analytical, diagnostic, and food testing kits" that contain I^{F22} the following precursor chemicals] in an amount not exceeding 300 grams per chemical.

Chemical Name	CAS Number	Regulation 53A applies?
Ammonium hydrogen fluoride [F23 or ammonium bifluoride];	1341-49-7	Yes to all items in column 1 of this table
[F24Arsenic trichloride	7784-34-1	
Benzilic Acid	76-93-7]	
2-Chloroethanol;	107-07-3	
Diethylamine;	109-89-7	
N,N-Diethylaminoethanol;	100-37-8	
Diethyl chlorophosphite;	589-57-1	
[F24Diethyl ethylphosphonate;	78-38-6	
Diethyl methylphosphonate;	683-08-9	
Diethyl methylphosphonite;	15715-41-0	
Diethyl-N,N-dimethylphosphoroamidate;	2404-03-7	
Diethyl phosphite;	762-04-9]	
O,O-Diethyl phosphorodithioate;	298-06-6	
O,O-Diethyl phosphorothioate;	2465-65-8	
Di-isopropylamine;	108-18-9	
[F24Dimethyl ethylphosphonate;	6163-75-3	
Dimethyl methylphosphonate;	756-79-6	
Dimethyl phosphite (dimethyl hydrogen phosphite);	868-85-9]	
Dimethylamine;	124-40-3	
Dimethylamine hydrochloride;	506-59-2	
Ethyl chlorofluorophosphate;	762-77-6	
Ethyl dichlorophosphate;	1498-51-7	
Ethyl difluorophosphate;	460-52-6	
[F24Ethyl phosphonous dichloride [Ethyl phosphinyl dichloride];	1498-40-4	
Ethyl phosphonus difluoride [Ethyl phosphinyl difluoride];	430-78-4	
Ethyl phosphonyl dichloride;	1066-50-8	
Ethyldiethanolamine;	139-87-7]	
Hydrogen fluoride;	7664-39-3	
3-Hydroxyl-1-methylpiperidine;	3554-74-3	
Methyl benzilate;	76-89-1	

Chemical Name	CAS Number	Regulation 53A applies?
Methyl chlorofluorophosphate;	754-01-8	riegiumien verr appries.
Methyl dichlorophosphate;	677-24-7	
Methyl difluorophosphate;	22382-13-4	
[F24Methylphosphonic acid;	993-13-5	
Methylphosphonothioic dichloride;	676-98-2]	
N,N Diethylacetamidine;	14277-06-6	
N,N-Diethylbutanamidine;	53510-30-8	
N,N-Diethylformamidine;	90324-67-7	
N,N Diethylisobutanamidine;	1342789-47-2	
N,N-Diethylpropanamidine;	84764-73-8	
[F24N,N-Diisopropylaminoethanethiol hydrochloride;	41480-75-5	
N,N-Diisopropyl-beta- aminoethane thiol;	5842-07-9	
N,N-Diisopropyl-beta- aminoethanol;	96-80-0	
N,N-Diisopropyl-beta-aminoethyl chloride;	96-79-7	
N,N-Diisopropyl-beta-aminoethyl chloride hydrochloride;	4261-68-1]	
N,N-Diisopropylbutanamidine;	1315467-17-4	
N,N-Diisopropylformamidine;	857522-08-8	
N,N-Dimethylacetamidine;	2909-14-0	
[F24N,N-dimethylamino- phosphoryl dichloride;	677-43-0]	
N,N-Dimethylbutanamidine;	1340437-35-5	
N,N-Dimethylformamidine;	44205-42-7	
N,N-Dimethylisobutanamidine;	321881-25-8	
N,N-Dimethylpropanamidine;	56776-14-8	
N,N-Dipropylacetamidine;	1339586-99-0	
N,N-Dipropylbutanamidine;	1342422-35-8	
N,N-Dipropylformamidine;	48044-20-8	
N,N-Dipropylisobutanamidine;	1342700-45-1	
N,N-Dipropylpropanamidine;	1341496-89-6	
[F24Phosphorus oxychloride;	10025-87-3	

Chemical Name	CAS Number	Regulation 53A applies?
Phosphorus pentachloride;	10026-13-8]	
Phosphorus pentasulfide;	1314-80-3	
[F24Phosphorus trichloride;	7719-12-2]	
Pinacolone;	75-97-8	
[F24Pinacolyl alcohol;	464-07-3]	
Potassium bifluoride;	7789-29-9	
Potassium cyanide;	151-50-8	
Potassium fluoride;	7789-23-3	
[F243-Quinuclidinol;	1619-34-7]	
3-Quinuclidone;	3731-38-2	
Sodium bifluoride;	1333-83-1	
Sodium cyanide;	143-33-9	
Sodium fluoride;	7681-49-4	
Sodium hexafluorosilicate;	16893-85-9	
Sodium sulfide;	1313-82-2	
[F24Sulfur dichloride;	10545-99-0	
Sulfur monochloride;	10025-67-9	
Thiodiglycol;	111-48-8	
Thionyl chloride;	7719-09-7	
Triethanolamine;	102-71-6]	
Triethanolamine hydrochloride;	637-39-8	
[F24Triethyl phosphite;	122-52-1	
Trimethyl phosphite;	121-45-9]	
Tri-isopropyl phosphite.	116-17-6]	

- **F22** Words in Sch. 3C Pt. 4 substituted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(16)(g)**
- **F23** Words in Sch. 3C Pt. 4 inserted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), regs. 1(3), **22(16)(h)(i)**
- **F24** Words in Sch. 3C Pt. 4 inserted (15.12.2023) by The Russia (Sanctions) (EU Exit) (Amendment) (No. 4) Regulations 2023 (S.I. 2023/1364), reg. 1(3), **Sch. 3**

Changes to legislation:There are currently no known outstanding effects for the The Russia (Sanctions) (EU Exit) Regulations 2019, SCHEDULE 3C.