

**Revised Annex II of the Plan for ongoing
monitoring and verification**

Items to be notified under the Export / Import Mechanism approved by SCR1051

Provisions related to Chemical Items

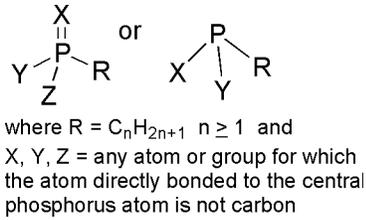
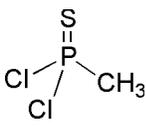
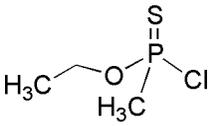
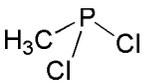
1. The following list (List A) contains chemicals capable of being used for the development, production or acquisition of chemical weapons, but which also are usable for purposes not prohibited by resolution 687 (1991) and, therefore, are subject to notification under the Export/Import monitoring mechanism for Iraq approved by Security Council resolution 1051 (1996). For the purposes of this annex the chemicals listed include their chemical forms and mixtures.

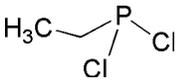
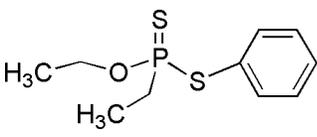
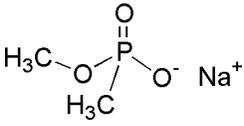
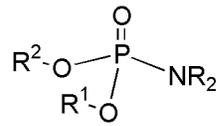
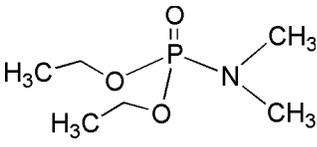
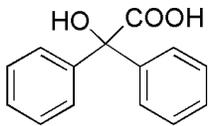
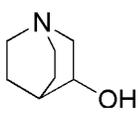
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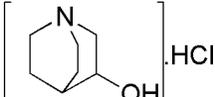
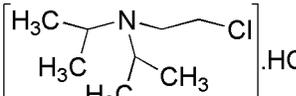
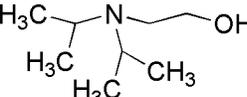
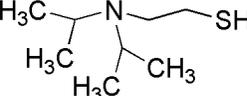
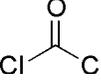
All mixtures which contain two or more chemicals from List A in any percentage, are subject to notification, but mixtures that contain less than 10% (weight/weight; on a solvent free basis) of only one chemical of List A are exempted.

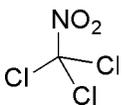
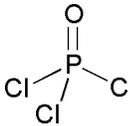
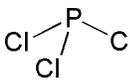
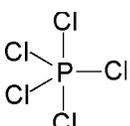
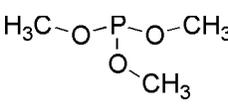
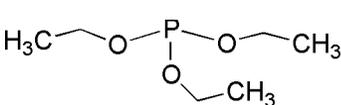
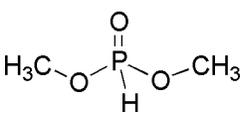
The term chemical forms means all stereoisomers, allotropes or isotopes of the chemical in any physical state (for example gaseous, liquid, solid, solvated, powdered etc).

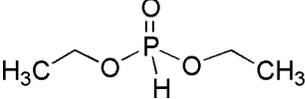
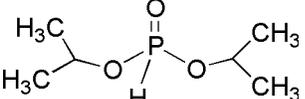
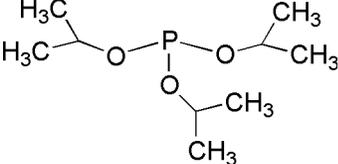
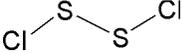
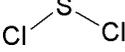
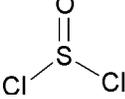
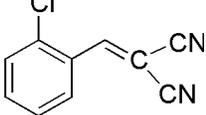
List A: Dual-Use Chemicals Requiring Notification

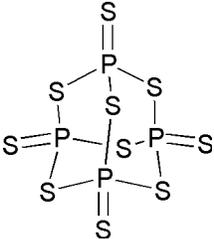
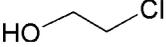
ITEM	STRUCTURE
<p>A.01 (Commodity Designator Code: CA000A01)</p> <p>Chemicals, except those specified in list B of this annex, containing a phosphorus atom to which is bonded one alkyl group but no further carbon atoms.</p>	 <p>where R = C_nH_{2n+1} n ≥ 1 and X, Y, Z = any atom or group for which the atom directly bonded to the central phosphorus atom is not carbon</p>
<p>for example: Methylphosphonothioic dichloride [CAS No. 676-98-2]</p>	
<p>for example: O-Ethyl methylphosphonothioic chloride [CAS No. 2524-16-5]</p>	
<p>for example: Methylphosphonous dichloride [CAS No. 676-83-5]</p>	

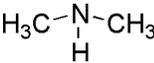
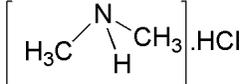
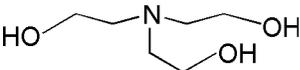
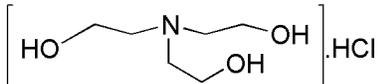
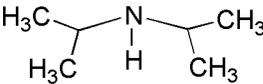
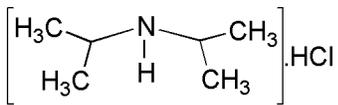
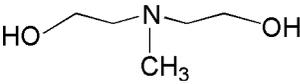
ITEM	STRUCTURE
for example: Ethylphosphonous dichloride [CAS No. 1498-40-4]	
for example: O-Ethyl S-phenyl ethylphosphonothiolothionate [CAS No. 944-22-9] (also known as: Fonofos)	
for example: Methylphosphonic acid, monomethyl ester, sodium salt. [CAS No. 73750-69-3]	
A.02 (Commodity Designator Code: CA000A02) Dialkyl (Me, Et, n-Pr or i-Pr) N,N-dialkyl (Me, Et, n-Pr or i-Pr)-phosphoramidates	 <p style="text-align: center;">where R, R¹, R² = C_nH_{2n+1} n = 1-3</p>
for example: Diethyl N,N-dimethylphosphoramidate [CAS No. 2404-03-7]	
A.03 (Commodity Designator Code: CA000A03) Arsenic trichloride [CAS No. 7784-34-1]	AsCl_3
A.04 (Commodity Designator Code: CA000A04) 2,2-Diphenyl-2-hydroxyacetic acid [CAS No. 76-93-7] (also known as: benzilic acid)	
A.05 (Commodity Designator Code: CA000A05) Quinuclidin-3-ol [CAS No. 1619-34-7] and corresponding protonated salts	

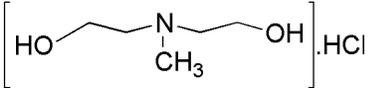
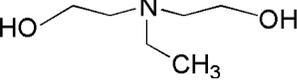
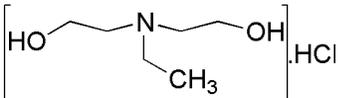
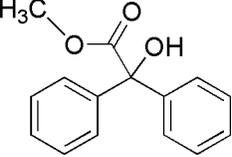
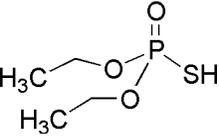
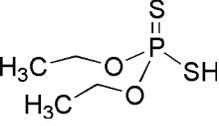
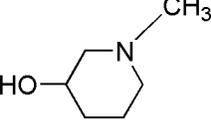
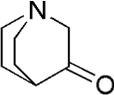
ITEM	STRUCTURE
for example: Quinuclidin-3-ol hydrochloride [CAS No. 6238-13-7]	
A.06 (Commodity Designator Code: CA000A06) N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethyl-2-chloride and corresponding protonated salts	$R_2N-CH_2-CH_2-Cl$ where R = C _n H _{2n+1} n = 1-3
for example: 2-(Diisopropylamino)ethyl chloride hydrochloride [CAS No. 4261-68-1]	
A.07 (Commodity Designator Code: CA000A07) N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethane-2-ol and corresponding protonated salts	$R_2N-CH_2-CH_2-OH$ where R = C _n H _{2n+1} n = 1-3
for example: 2-(Diisopropylamino)ethanol [CAS No. 96-80-0]	
A.08 (Commodity Designator Code: CA000A08) N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethane-2-thiol and corresponding protonated salts	$R_2N-CH_2-CH_2-SH$ where R = C _n H _{2n+1} n = 1-3
for example: 2-(Diisopropylamino)ethanethiol [CAS No. 5842-07-9]	
A.09 (Commodity Designator Code: CA000A09) Phosgene [CAS No. 75-44-5] (also known as: carbonyl dichloride)	
A.10 (Commodity Designator Code: CA000A10) Cyanogen chloride [CAS No. 506-77-4]	$Cl-C \equiv N$

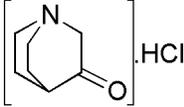
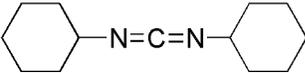
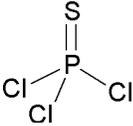
ITEM	STRUCTURE
<p>A.11 (Commodity Designator Code: CA000A11)</p> <p>Hydrogen cyanide [CAS No. 74-90-8]</p>	<p>HCN</p>
<p>A.12 (Commodity Designator Code: CA000A12)</p> <p>Trichloronitromethane [CAS No. 76-06-2]</p> <p>(also known as: chloropicrin)</p>	
<p>A.13 (Commodity Designator Code: CA000A13)</p> <p>Phosphorus oxychloride [CAS No. 10025-87-3]</p>	
<p>A.14 (Commodity Designator Code: CA000A14)</p> <p>Phosphorus trichloride [CAS No. 7719-12-2]</p>	
<p>A.15 (Commodity Designator Code: CA000A15)</p> <p>Phosphorus pentachloride [CAS No. 10026-13-8]</p>	
<p>A.16 (Commodity Designator Code: CA000A16)</p> <p>Trimethyl phosphite [CAS No. 121-45-9]</p>	
<p>A.17 (Commodity Designator Code: CA000A17)</p> <p>Triethyl phosphite [CAS No. 122-52-1]</p>	
<p>A.18 (Commodity Designator Code: CA000A18)</p> <p>Dimethyl phosphite [CAS No. 868-85-9]</p> <p>(also known as: dimethyl phosphonate; dimethyl hydrogen phosphite)</p>	

ITEM	STRUCTURE
A.19 (Commodity Designator Code: CA000A19)	
Diethyl phosphite [CAS No. 762-04-9]	
(also known as: diethyl phosphonate)	
A.20 (Commodity Designator Code: CA000A20)	
Diisopropyl phosphite [CAS No. 1809-20-7]	
(also known as: diisopropyl phosphonate)	
A.21 (Commodity Designator Code: CA000A21)	
Triisopropyl phosphite [CAS No. 116-17-6]	
A.22 (Commodity Designator Code: CA000A22)	
Sulphur monochloride [CAS No. 10025-67-9]	
A.23 (Commodity Designator Code: CA000A23)	
Sulphur dichloride [CAS No. 10545-99-0]	
A.24 (Commodity Designator Code: CA000A24)	
Thionyl chloride [CAS No. 7719-09-7]	
A.25 (Commodity Designator Code: CA000A25)	HF
Hydrogen fluoride [CAS No. 7664-39-3]	
A.26 (Commodity Designator Code: CA000A26)	
ortho-Chlorobenzylidene malononitrile [CAS No. 2698-41-1]	
(also known as: CS)	

ITEM	STRUCTURE
A.27 (Commodity Designator Code: CA000A27) Potassium fluoride [CAS No. 7789-23-3]	KF
A.28 (Commodity Designator Code: CA000A28) Ammonium bifluoride [CAS No. 1341-49-7]	NH ₄ F.HF
A.29 (Commodity Designator Code: CA000A29) Sodium bifluoride [CAS No. 1333-83-1]	NaF.HF
A.30 (Commodity Designator Code: CA000A30) Sodium fluoride [CAS No. 7681-49-4]	NaF
A.31 (Commodity Designator Code: CA000A31) Potassium bifluoride [CAS No. 7789-29-9]	KF.HF
A.32 (Commodity Designator Code: CA000A32) Sodium sulphide [CAS No. 1313-82-2]	Na ₂ S
A.33 (Commodity Designator Code: CA000A33) Phosphorus pentasulphide [CAS No. 1314-80-3]	P ₂ S ₅ exists as: 
A.34 (Commodity Designator Code: CA000A34) Chloroethanol [CAS No. 107-07-3]	

ITEM	STRUCTURE
<p>A.35 (Commodity Designator Code: CA000A35)</p> <p>Dimethylamine [CAS No. 124-40-3] and corresponding protonated salts</p>	
<p>for example: Dimethylamine hydrochloride [CAS No. 506-59-2]</p>	
<p>A.36 (Commodity Designator Code: CA000A36)</p> <p>Potassium cyanide [CAS No. 151-50-8]</p>	<p>KCN</p>
<p>A.37 (Commodity Designator Code: CA000A37)</p> <p>Sodium cyanide [CAS No. 143-33-9]</p>	<p>NaCN</p>
<p>A.38 (Commodity Designator Code: CA000A38)</p> <p>Triethanolamine [CAS No. 102-71-6] and corresponding protonated salts</p>	
<p>for example: Triethanolamine hydrochloride [CAS No. 637-39-8]</p>	
<p>A.39 (Commodity Designator Code: CA000A39)</p> <p>Diisopropylamine [CAS No. 108-18-9] and corresponding protonated salts</p>	
<p>for example: Diisopropylamine hydrochloride [CAS No. 819-79-4]</p>	
<p>A.40 (Commodity Designator Code: CA000A40)</p> <p>Methyl diethanolamine [CAS No. 105-59-9] and corresponding protonated salts</p>	

ITEM	STRUCTURE
for example: Methyl diethanolamine hydrochloride [CAS No. 54060-15-0]	
A.41 (Commodity Designator Code: CA000A41) Ethyl diethanolamine [CAS No. 139-87-7] and corresponding protonated salts	
for example: Ethyl diethanolamine hydrochloride [CAS No. 58901-15-8]	
A.42 (Commodity Designator Code: CA000A42) Methyl benzilate [CAS No. 76-89-1]	
A.43 (Commodity Designator Code: CA000A43) O,O-Diethyl phosphorothioate [CAS No. 2465-65-8]	
A.44 (Commodity Designator Code: CA000A44) O,O-Diethyl phosphorodithioate [CAS No. 298-06-6]	
A.45 (Commodity Designator Code: CA000A45) Ethylene oxide [CAS No. 75-21-8]	
A.46 (Commodity Designator Code: CA000A46) 3-Hydroxy-1-methylpiperidine [CAS No. 3554-74-3] and corresponding protonated salts	
A.47 (Commodity Designator Code: CA000A047) 3-Quinuclidone [3731-38-2] and corresponding protonated salts	

ITEM	STRUCTURE
for example: 3-Quinuclidone hydrochloride [CAS No. 1193-65-3]	
A.48 (Commodity Designator Code: CA000A48)	P
Phosphorus [CAS No. 7723-14-0]	
A.49 (Commodity Designator Code: CA000A49)	F ₂
Fluorine [CAS No. 7782-41-4]	
A.50 (Commodity Designator Code: CA000A50)	
Dicyclohexylcarbodiimide [CAS No. 538-75-0]	
A.51 (Commodity Designator Code: CA000A51)	
Thiophosphoryl Chloride [CAS No. 3982-91-0]	
(also known as: Phosphorus sulphochloride)	

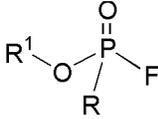
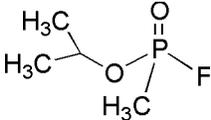
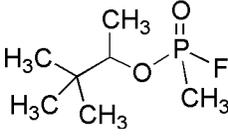
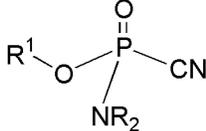
2. The following list (List B) contains chemicals that have little or no use except as chemical warfare agents or for the development, production or acquisition of chemical weapons, or which have been used by Iraq as essential precursors for chemical weapons and are, therefore, prohibited to Iraq, save under the procedure for special exceptions provided for in paragraph 32 of the Plan (S/22871/Rev.1).

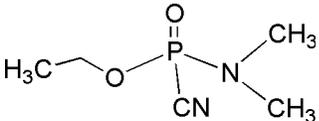
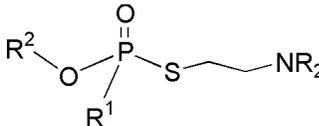
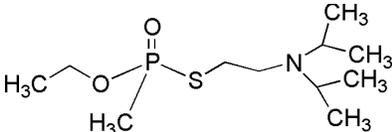
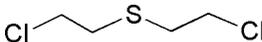
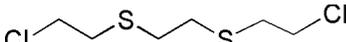
Note:

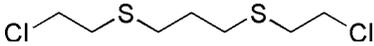
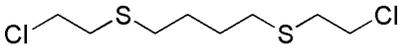
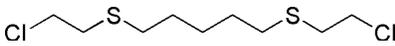
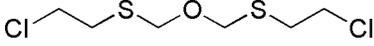
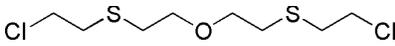
For the purposes of this annex the chemicals listed include their chemical forms and mixtures in any percentage save under the procedure for special exceptions provided for in paragraph 32 of the Plan.

The term chemical forms means all stereoisomers or isotopes of the chemical in any physical state (for example gaseous, liquid, solid, solvated, powdered etc).

**List B – Normally Prohibited Chemicals [except under paragraph 32
of the Plan (S/22871/Rev.1; 1991)]**

ITEM	STRUCTURE
<p>B.01 (Commodity Designator Code: CA000B01)</p> <p>O-Alkyl ($\leq C_{10}$, including cycloalkyl) alkyl (Me, Et, n-Pr or i-Pr) phosphonofluoridates</p>	 <p>where R = C_nH_{2n+1} n = 1-3 and R¹ = $\leq C_{10}$, including cycloalkyl</p>
<p>for example:</p> <p>O-Isopropyl methylphosphonofluoridate [CAS No. 107-44-8]</p> <p>(also known as: Sarin; GB)</p>	
<p>for example:</p> <p>O-Pinacoyl methylphosphonofluoridate [CAS No. 96-64-0]</p> <p>(also known as: Soman; GD)</p>	
<p>B.02 (Commodity Designator Code: CA000B02)</p> <p>O-Alkyl ($\leq C_{10}$, including cycloalkyl) N,N-dialkyl (Me, Et, n-Pr or i-Pr) phosphoramidocyanidates</p>	 <p>where R = C_nH_{2n+1} n = 1-3 and R¹ = $\leq C_{10}$, including cycloalkyl</p>

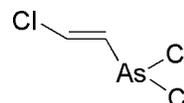
ITEM	STRUCTURE
<p>for example: O-Ethyl N,N-dimethylphosphoramidocyanidate [CAS No. 77-81-6]</p>	
(also known as: Tabun; GA)	
B.03 (Commodity Designator Code: CA000B03)	
<p>O-Alkyl (H or $\leq C_{10}$, including cycloalkyl) S-2-dialkyl (Me, Et, n-Pr or i-Pr) aminoethyl alkyl (Me, Et, n-Pr or i-Pr) phosphonothiolates or corresponding alkylated and protonated salts</p>	
	<p>where R, R¹ = C_nH_{2n+1} n = 1-3 and R² = $\leq C_{10}$, including cycloalkyl</p>
<p>for example: O-Ethyl S-[2-(diisopropylamino)ethyl] methylphosphonothiolate [CAS No. 50782-69-9]</p>	
(also known as: VX)	
B.04 (Commodity Designator Code: CA000B04)	
<u>Sulphur mustards:</u>	
<p>for example: 2-Chloroethylchloromethylsulphide [CAS No. 2625-76-5]</p>	
<p>for example: Bis(2-chloroethyl)sulphide [CAS No. 505-60-2]</p>	
(also known as: Sulphur Mustard; H)	
<p>for example: Bis(2-chloroethylthio)methane [CAS No. 63869-13-6]</p>	
<p>for example: 1,2-Bis(2-chloroethylthio)ethane [CAS No. 3563-36-8]</p>	
(also known as: Sesquimustard; Q)	

ITEM	STRUCTURE
for example: 1,3-Bis(2-chloroethylthio)-n-propane [CAS No. 63905-10-2]	
for example: 1,4-Bis(2-chloroethylthio)-n-butane [CAS No. 142868-93-7]	
for example: 1,5-Bis(2-chloroethylthio)-n-pentane [CAS No. 142868-94-8]	
for example: Bis(2-chloroethylthiomethyl)ether [CAS No. 63918-90-1]	
for example: Bis(2-chloroethylthioethyl)ether [CAS No. 63918-89-8]	
(also known as: O-mustard; T)	

B.05 (Commodity Designator Code: CA000B05)

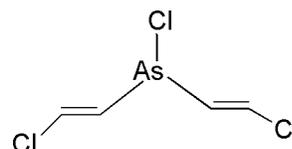
Lewisites:

for example:
 2-Chlorovinylchloroarsine
 [CAS No. 541-25-3]



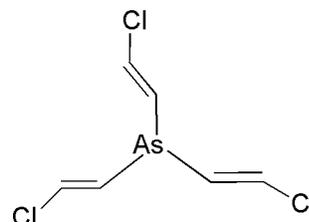
(also known as: Lewisite 1)

for example:
 Bis(2-chlorovinyl)chloroarsine
 [CAS No. 40334-69-8]

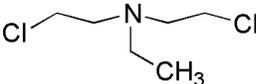
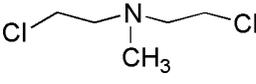
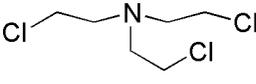
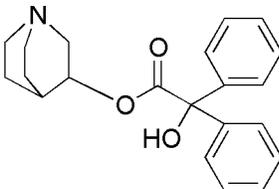
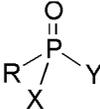
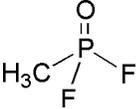


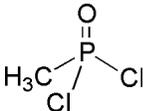
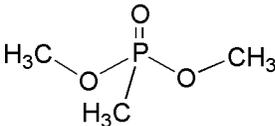
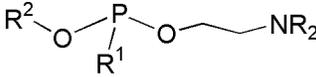
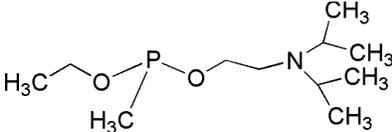
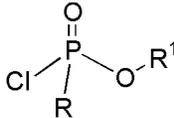
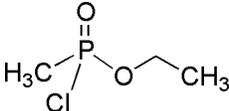
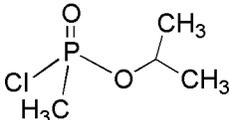
(also known as: Lewisite 2)

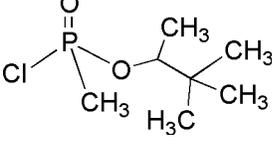
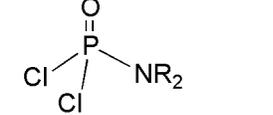
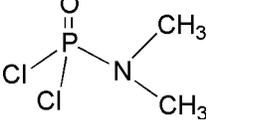
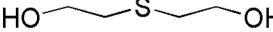
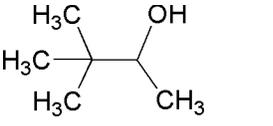
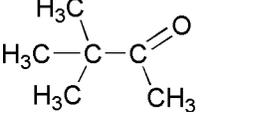
for example:
 Tris(2-chlorovinyl)arsine
 [CAS No. 40334-70-1]

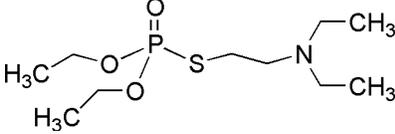
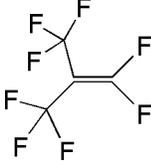
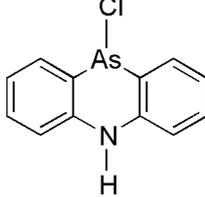
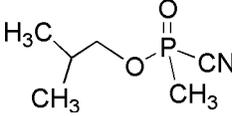


(also known as: Lewisite 3)

ITEM	STRUCTURE
B.06 (Commodity Designator Code: CA000B06)	
<u>Nitrogen mustards</u> and their protonated salts:	
for example: Bis(2-chloroethyl)ethylamine [CAS No. 538-07-8]	
(also known as: HN1)	
for example: Bis(2-chloroethyl)methylamine [CAS No. 51-75-2]	
(also known as: HN2)	
for example: Tris(2-chloroethyl)amine [CAS No. 555-77-1]	
(also known as: HN3)	
B.07 (Commodity Designator Code: CA000B07)	
3-Quinuclidinyl benzilate [CAS No. 6581-06-2]	
(also known as: BZ)	
B.08 (Commodity Designator Code: CA000B08)	
Alkyl (Me, Et, n-Pr or i-Pr) phosphonyldihalides	
	where R = C _n H _{2n+1} n = 1-3 and X, Y = halides
for example: Methylphosphonyl difluoride [CAS No. 676-99-3]	
(also known as: DF; MPF)	

ITEM	STRUCTURE
for example: Methylphosphonyl dichloride [CAS No. 676-97-1]	
(also known as: DC; MPC)	
B.09 (Commodity Designator Code: CA000B09)	
Dimethyl methylphosphonate [CAS No. 756-79-6]	
(also known as: DMMP)	
B.10 (Commodity Designator Code: CA000B10)	
O-Alkyl (H or ≤C ₁₀ , including cycloalkyl) O-2-Dialkyl (Me, Et, n-Pr or i-Pr)-aminoethyl alkyl (Me, Et, n-Pr or i-Pr) phosphonites and corresponding alkylated salts and protonated salts	 <p data-bbox="998 821 1341 884">where R, R¹ = C_nH_{2n+1} n = 1-3 and R² = ≤C₁₀, including cycloalkyl</p>
O-Ethyl O-2-diisopropylaminoethyl methylphosphonite [CAS No. 57856-11-8]	
(also known as: QL)	
B.11 (Commodity Designator Code: CA000B11)	
O-Alkyl (≤C ₁₀ , including cycloalkyl) alkyl (Me, Et, n-Pr or i-Pr) phosphonochloridates	 <p data-bbox="998 1287 1308 1346">where R = C_nH_{2n+1} n = 1-3 and R¹ = ≤C₁₀, including cycloalkyl</p>
for example: O-Ethyl methylphosphonchloridate [CAS No. 5284-09-3]	
for example: O-Isopropyl methylphosphonochloridate [CAS No. 1445-76-7]	
(also known as: Chlorosarin)	

ITEM	STRUCTURE
<p>for example: O-Pinacolyl methylphosphonochloridate [CAS No. 7040-57-5]</p> <p>(also known as: Chlorosoman)</p>	
<p>B.12 (Commodity Designator Code: CA000B12)</p> <p>N,N-Dialkyl (Me, Et, n-Pr or i-Pr) phosphoramidic dihalides</p>	 <p>where R = C_nH_{2n+1} n = 1-3</p>
<p>for example: N,N-dimethylphosphoramidic dichloride [CAS No. 677-43-0]</p>	
<p>B.13 (Commodity Designator Code: CA000B13)</p> <p>Bis(2-hydroxyethyl)sulphide [CAS No. 111-48-8]</p> <p>(also known as: Thiodiglycol)</p>	
<p>B.14 (Commodity Designator Code: CA000B14)</p> <p>Bis(2-hydroxyethyl)disulphide [CAS No. 1892-29-1]</p> <p>(also known as: Dithiodiglycol)</p>	
<p>B.15 (Commodity Designator Code: CA000B15)</p> <p>3,3-Dimethylbutan-2-ol [CAS No. 464-07-3]</p> <p>(also known as: Pinacolyl alcohol)</p>	
<p>B.16 (Commodity Designator Code: CA000B16)</p> <p>3,3-Dimethylbutan-2-one [CAS No. 75-97-8]</p> <p>(also known as: Pinacolone)</p>	

ITEM	STRUCTURE
<p>B.17 (Commodity Designator Code: CA000B17)</p> <p>O,O-Diethyl S-[2-(diethylamino)ethyl] phosphorothiolate [CAS No. 78-53-5] and corresponding alkylated and protonated salts</p> <p>(also known as: Amiton)</p>	
<p>B.18 (Commodity Designator Code: CA000B18)</p> <p>1,1,3,3,3-Pentafluoro-2-(trifluoromethyl)-1-propene [CAS No. 382-21-8]</p> <p>(also known as: PFIB)</p>	
<p>B.19 (Commodity Designator Code: CA000B19)</p> <p>Diphenylaminechloroarsine [CAS No. 578-94-9]</p> <p>(also known as: Adamsite)</p>	
<p>B.20 (Commodity Designator Code: CA000B20)</p> <p>O-Isobutyl methylphosphonocyanidate</p>	

DUAL-USE EQUIPMENT

10.4.1.1 (Commodity Designator Code: CA010411)

Corrosion resistant¹ reactor vessels or reactors with an internal volume of 0.05 m³ or greater but less than 20 m³.

Corrosion resistant¹ agitators for use in reactor vessels.

10.4.1.2 (Commodity Designator Code: CA010412)

Corrosion resistant¹ condensers and corrosion resistant¹ heat exchangers with a heat transfer surface area of 0.03 m² or greater.

10.4.1.3 (Commodity Designator Code: CA010413)

Corrosion resistant¹ distillation and corrosion resistant¹ absorption columns with an internal diameter of 0.05 m or greater.

10.4.1.4 (Commodity Designator Code: CA010414)

Corrosion resistant¹ scrubbers and corrosion resistant¹ separators for use in scrubbers.

10.4.1.5 (Commodity Designator Code: CA010415)

Corrosion resistant¹ tanks and other storage vessels with an internal volume of 0.05 m³ or more.

10.4.1.6 (Commodity Designator Code: CA010416)

Sheets made of fluoropolymer or corrosion resistant¹ metal or alloy with a surface area of more than 1 m² and a thickness of 4 mm or more.

10.4.2 (Commodity Designator Code: CA010420)

Corrosion resistant¹ multiple-seal, canned drive, magnetic drive, bellows or diaphragm pumps, or progressive cavity tubing pumps (including peristaltic or roller pumps in which only the elastometric tubing is corrosion resistant¹) with manufacturer's specified maximum flow-rate of 0.01 m³/minute or greater, under standard temperature (293 K) and standard pressure conditions (101.30 kPa).

Corrosion resistant¹ vacuum pumps with manufacture's specified maximum flow-rate greater than 0.08 m³/minute under standard temperature (293 K) and pressure (101.3 kPa) conditions.

10.4.3 (Commodity Designator Code: CA010430)

Corrosion resistant¹ conduits (including single and double-walled pipes, towers, columns and tubes) with an inner diameter of 0.05 m or more.

10.4.4 (Commodity Designator Code: CA010440)

Corrosion resistant¹ valves with a smallest inner diameter of 12.5 mm or more.

10.4.5 (Commodity Designator Code: CA010450)

Corrosion resistant¹ remote-controlled filling equipment.

10.4.6 (Commodity Designator Code: CA010460)

Incineration equipment designed for the disposal of toxic chemicals with an average combustion chamber temperature of over 1273 K (1000⁰ C) or with catalytic incineration over 623 K (350⁰ C).

10.4.7 (Commodity Designator Code: CA010470)

Equipment and instruments designed for detecting, measuring or recording directly and near real time (within one minute),

- (a) the air concentration of List A dual-use chemicals or toxic organic substances/organic compounds containing the elements chlorine, fluorine, phosphorus or sulphur, with a detection threshold from 0.3 mg/m³ ; or
- (b) levels of cholinesterase-inhibitors in the air, including specially designed equipment for the detection or identification of chemical warfare agents.

Note: The above entry excludes smoke detectors for household protection.

10.4.8 (Commodity Designator Code: CA010480)

Chemical protection equipment designed for protection against toxic chemicals (as given in UNMOVIC lists A & B) as follows:

- (a) external ventilated semi- or full-protection personal suits;
- (b) autonomous respirators; and
- (c) air filtration equipment using liquid or solid adsorption agent.

Note: The above entry excludes equipment specially designed for fire fighting use and specially designed equipment for use by personnel in emergency evacuation procedures.

Materials encompassed by the term "Corrosion Resistant"

^{1/} For the purposes of this annex, "corrosion resistant" means where all surfaces that come in direct contact with the chemical(s) being processed are made from the following:

- (i) glass (including vitrified or enamelled coatings or glass lining);
- (ii) ceramics;
- (iii) ferrosilicons;
- (iv) titanium or titanium alloys - (some examples: Monel 10, Monel 11, titanium 20, titanium nitride 70, titanium nitride 90);
- (v) tantalum or tantalum alloys;
- (vi) zirconium or zirconium alloys;
- (vii) nickel or alloys with more than 40 per cent nickel by weight - (some examples: Alloy 400, AMS 4675, ASME SB164-B, ASTM B127, DIN2.4375, EN60, FM60, IN60, Hastelloy, Monel, K500, UNS NO4400, Inconel 600, Colmonoy Nr.6);
- (viii) alloys with more than 25 per cent nickel and 20 per cent chromium and/or copper by weight - (some examples: Alloy 825, Cunifer 30Cr, EniCu-7, IN 732 X, Inconel 800, Monel 67, Monel WE 187, Nicrofer 3033, UNS C71900);
- (ix) graphite or carbon/graphite (a composite consisting of amorphous carbon and graphite in which the graphite content is 8 per cent or more by weight);
- (x) fluoropolymers - (some examples: Aclar, Aflex COP, Aflon COP 88, F 40, Flurorex, Ftorlon, Ftoroplast, Neoflon, ETFE, Teflon, Tetzal, PVDF, PVF₂, PFA, PTFE, PE TFE 500 LZ, Halar; Viton A);
- (xi) silver.