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Guide to Scheduled Chemicals

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This pamphlet is part of a series about the Chemical Weapons Convention (CWC) and its potential security impact prepared by the Defense Treaty Inspection Readiness Program (DTIRP) to increase ***Readiness Through Awareness*** within the United States Government and government contractor community. Additional copies of this pamphlet, as well as other cost-free information about arms control treaties and agreements potentially affecting your facility and related security countermeasures, are also available from DTIRP Outreach Program personnel.

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Introduction

The purpose of this guide is to provide a quick reference to the Chemical Weapons Convention (CWC) scheduled chemicals. It also addresses provisions related to activities not prohibited by the Convention. The information is intended to assist site commanders, program managers, site/facility managers, facility security officers, and site assistance teams in site preparation for "routine" and challenge inspections conducted under the Convention.

The guide is divided into four sections. The first section contains a synopsis of provisions governing scheduled and unscheduled chemicals subject to verification activity under the Convention with thresholds for reporting and inspection. The second section lists the scheduled chemicals as found in the Convention. The third section provides a more comprehensive, cross-referenced, alphabetical listing of scheduled chemicals and unscheduled precursors to the scheduled chemicals where information is available. This section includes some, but not all, of the compounds from the families of chemicals depicted in Schedules 1 and 2. It also provides the applicable Chemical Abstracts Service (CAS) registry number and, where available, precursors and catalysts used in production. The final section lists the primary scheduled and associated chemicals by CAS number.

Quick Reference to Verification of Activities Not Prohibited under the CWC

Schedule 1 Provisions

Monitored Activity—Production, storage, transfer, and consumption for research, medical, pharmaceutical, or protective purposes at a single, small-scale facility

- Facility approved by State Party
- Annual production not exceeding 1 metric ton
- Annual declaration of past and projected activities
- Required initial inspection and facility agreement (not later than Entry into Force (EIF) +180 days)
- Inspection number and duration based on risk
- Inspection notification: not less than 36 hours before arrival at the facility (84 hours for initial inspections)

Monitored Activity—Production (including methods) storage, transfer, and consumption for protective purposes outside the single, small-scale facility

- One facility approved by State Party
- Aggregate production not exceeding 10 kg per year
- Annual declaration of past and projected activities
- Required initial inspection and facility agreement (not later than EIF +180 days)
- Inspection number and duration based on risk
- Inspection notification: not less than 36 hours before arrival at the facility (84 hours for initial inspections)

Monitored Activity—Production, storage, transfer, and consumption for research, medical, or pharmaceutical purposes outside the single, small-scale facility

- Facilities approved by State Party
- Aggregate production in excess of 100 g, but not exceeding 10 kg per year per facility
- Annual declaration of past and projected activities
- Required initial inspection and facility agreement (not later than EIF +180 days)
- Inspection number and duration based on risk
- Inspection notification: not less than 36 hours before arrival at the facility (84 hours for initial inspections)

SCHEDULE 2 PROVISIONS

Monitored Activity—Production, storage, processing, consumption, import, and export of Schedule 2 chemicals

- Reporting threshold for plant sites—One or more plant(s) which produced, processed, or consumed during any of the previous 3 years or is anticipated to produce, process, or consume in the next year:
  - 1 kg of 3-Quinuclidinyl benzilate (BZ, QNB)
  - 100 kg of any other Schedule 2, Part A chemical
  - 1 metric ton of any Schedule 2, Part B chemical
- Inspection threshold for plants—One or more plant(s) which produced, processed, or consumed during any of the previous 3 years or is anticipated to produce, process, or consume in the next year:
  - 10 kg of 3-Quinuclidinyl benzilate
  - 1 metric ton of any other Schedule 2, Part A chemical
  - 10 metric tons of a Schedule 2, Part B chemical
- Initial inspection within 3 years of EIF
- Facility agreement required (90 days after initial inspection)
- Inspection notification: not less than 48 hours before arrival at plant site (84 hours for initial inspections)
- Inspection number: no more than two per year
- Inspection duration: not to exceed 96 hours

SCHEDULE 3 PROVISIONS

Monitored Activity—Production of Schedule 3 chemicals

- Reporting threshold—one or more plants which produced during the previous year or are anticipated to produce in the next year:
  - 30 metric tons of a Schedule 3 chemical
- Inspection threshold—plant sites which produced during the previous year or are anticipated to produce in the next year:
  - 200 metric tons aggregate of a declared Schedule 3 chemical
- No initial inspection
- Facility agreement not required
- Inspection notification: not less than 120 hours before arrival at plant site
- Inspection number: no more than two per year
- Inspection duration: not to exceed 24 hours

OTHER CHEMICAL PRODUCTION FACILITIES

Monitored Activity—Production by synthesis of unscheduled discrete organic chemicals

- Reporting threshold:
  - Plant sites which produced 200 metric tons of unscheduled discrete organic chemicals during the previous year, or
  - Plant sites comprising one or more plants which produced during the previous year 30 metric tons of an unscheduled discrete organic chemical containing phosphorous, sulfur, or fluorine
- Inspection threshold:
  - Plant sites which produced 200 metric tons of unscheduled discrete organic chemicals during the previous year, or
  - Plant sites comprising one or more plants which produced during the previous year 200 metric tons of an unscheduled discrete organic chemical containing phosphorous, sulfur, or fluorine
- No initial inspection
- Facility agreement not required Inspections start fourth year after EIF
- Inspection notification: not less than 120 hours before arrival at plant site
- Inspection number: no more than two per year
- Inspection duration: not to exceed 24 hours

List of Scheduled Chemicals from the Convention

SCHEDULE 1 CHEMICALS/PRECURSORS	CAS Number
A. Toxic Chemicals:	
(1) O-Alkyl ($\geq C_{10}$, incl. cycloalkyl) alkyl (Me, Et, n-Pr or i-Pr)-phosphonofluoridates	
Sarin: O-Isopropyl methylphosphonofluoridate	107-44-8
Soman: O-Pinacolyl methylphosphonofluoridate	96-64-0
(2) O-Alkyl ($\geq C$, incl. cycloalkyl) N,N-dialkyl (Me, Et, n-Pr or i-Pr) phosphoramidocyanidates	
Tabun: O-Ethyl-N,N-dimethylphosphoramidocyanidate	77-81-6
(3) O-Alkyl (H or $\geq C_{10}$, incl. cycloalkyl) S-2-dialkyl (Me, Et, n-Pr or i-Pr)-aminoethyl alkyl Me, Et, n-Pr or i-Pr) phosphonothiolates and corresponding alkylated or protonated salts	
VX: O-Ethyl S-2-diisopropylaminoethyl methyl phosphonothiolate	50782-69-9
(4) Sulfur Mustards:	
2-Chloroethylchloromethylsulfide	2625-76-5
Mustard gas: Bis(2-chloroethyl)sulfide	505-60-2
Bis(2-chloroethylthio)methane	63869-13-6
Sesquimustard: 1,2-Bis(2-chloroethylthio)ethane	3563-36-8
1,3-Bis(2-chloroethylthio)-n-propane	63905-10-2
1,4-Bis(2-chloroethylthio)-n-butane	142868-93-7
1,5-Bis(2-chloroethylthio)-n-pentane	142868-94-8
Bis(2-chloroethylthiomethyl)ether	63918-90-1
O-Mustard: Bis(2-chloroethylthioethyl)ether	63918-89-8
(5) Lewisites:	
Lewisite 1: 2-Chlorovinyldichloroarsine	541-25-3
Lewisite 2: Bis(2-chlorovinyl)chloroarsine	40334-69-8
Lewisite 3: Tris(2-chlorovinyl)arsine	40334-70-1
(6) Nitrogen Mustards:	
HN 1: Bis(2-chloroethyl)ethylamine	538-07-8
HN 2: Bis(2-chloroethyl)methylamine	51-75-2
HN 3: Tris(2-chloroethyl)amine	555-77-1
(7) Saxitoxin	35523-89-8
(8) Ricin	9009-86-3

B. Precursors:	
(9) Alkyl(Me, Et, n-Pr or i-Pr)phosphonyldifluorides	
DF: Methylphosphonyldifluoride	676-99-3
(10) O-Alkyl(H or $\geq C_{10}$, incl. cycloalkyl) O-2-dialkyl (Me, Et, n-Pr or i-Pr)-aminoethyl alkyl (Me, Et, n-Pr or i-Pr)phosphonites and corresponding alkylated or protonated salts	
QL: O-Ethyl O-2-diisopropylaminoethyl methylphosphonite	57856-11-8
(11) Chlorosarin: O-Isopropyl methylphosphonochloridate	1445-76-7
Chlorosoman: O-Pinacolyl methylphosphonochloridate	7040-57-5

SCHEDULE 2 CHEMICALS/PRECURSORS	CAS Number
A. Toxic Chemicals:	
(1) Amiton: O,O-Diethyl S-[2-(diethylamino)ethyl] phosphorothiolate and corresponding alkylated or protonated salts	78-53-5
(2) PFIB: 1,1,3,3,3-Pentafluoro-2-(trifluoromethyl)-1-propene	382-21-8
(3) BZ: 3-Quinuclidinyl benzilate	6581-06-2
B. Precursors:	
(4) Chemicals, except for those listed in Schedule 1, containing a phosphorus atom to which is bonded one methyl, ethyl, or propyl (normal or iso) group but no further carbon atoms	
Methylphosphonyl dichloride	676-97-1
Dimethylmethylphosphonate	756-79-6
Exemption: Fonofos: O-Ethyl S-phenyl ethylphosphonothiolothionate	944-22-9
(5) N,N-Dialkyl (Me, Et, n-Pr or i-Pr) phosphoramidic dihalides	
(6) Dialkyl (Me, Et, n-Pr or i-Pr) N,N-dialkyl (Me, Et, n-Pr or i-Pr)-phosphoramidates	
(7) Arsenic trichloride	7784-34-1
(8) 2,2-Diphenyl-2-hydroxyacetic acid	76-93-7
(9) Quinuclidine-3-ol	1619-34-7
(10) N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethyl-2-chlorides and corresponding protonated salts	

(11)	N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethane-2-ols and corresponding protonated salts	
	Exemptions: N,N-Dimethylaminoethanol and corresponding protonated salts	108-01-0
	N,N-Diethylaminoethanol and corresponding protonated salts	100-37-8
(12)	N,N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethane-2-thiols and corresponding protonated salts	
(13)	Thiodiglycol: Bis(2-hydroxyethyl)sulfide	111-48-8
(14)	Pinacolyl alcohol: 3,3-Dimethylbutane-2-ol	464-07-3

SCHEDULE 3 CHEMICALS/PRECURSORS		CAS Number
A. Toxic Chemicals:		
(1)	Phosgene: Carbonyl dichloride	75-44-5
(2)	Cyanogen chloride	506-77-4
(3)	Hydrogen cyanide	74-90-8
(4)	Chloropicrin: Trichloronitromethane	76-06-2
B. Precursors:		
(5)	Phosphorus oxychloride	10025-87-3
(6)	Phosphorus trichloride	7719-12-2
(7)	Phosphorus pentachloride	10026-13-8
(8)	Trimethyl phosphite	121-45-9
(9)	Triethyl phosphite	122-52-1
(10)	Dimethyl phosphite	868-85-9
(11)	Diethyl phosphite	762-04-9
(12)	Sulfur monochloride	10025-67-9
(13)	Sulfur dichloride	10545-99-0
(14)	Thionyl chloride	7719-09-7
(15)	Ethyldiethanolamine	139-87-7
(16)	Methyldiethanolamine	105-59-9
(17)	Triethanolamine	102-71-6

CWC Chemicals

Chemical: (.beta.-chloroethyl)diisopropylamine hydrochloride

See: 2-(N,N-Diisopropylamino) ethyl chloride hydrochloride

Chemical: (2-Chloro-ethyl)-dipropyl-amine hydrochloride

See: (N,N-Dipropylamino) ethyl chloride hydrochloride

Chemical: (2-Chloroethyl) diisopropylamine hydrochloride

See: 2-(N,N-Diisopropylamino) ethyl chloride hydrochloride

Chemical: (2-Chloroethyl)-dipropylamine

See: 2-(N,N-Dipropylamino) ethyl chloride

Chemical: (2-Chloroethyl)diethylamine

See: 2-(N,N-Diethylamino)ethyl chloride

Chemical: (N,N-diethylamino) ethyl chloride hydrochloride

Synonym: 2-Chlorotriethylamine hydrochloride
.beta.-(Diethylamino) ethyl chloride hydrochloride
Triethylamine, 2-chloro-, hydrochloride
Schedule: 2B
CAS No: 869-24-9
Use: Scheduled precursor to VE and VM

Chemical: (N,N-Diisopropylamino) ethanol

See: N,N-diisopropyl-(beta)-aminoethanol

Chemical: (N,N-Dimethylamino) ethyl chloride hydrochloride

Synonym: 2-Dimethylaminic ethyl chloride hydrochloride
Dimethylaminoethyl chloride hydrochloride
Schedule: 2B
CAS No: 4584-46-7
Use: Scheduled precursor to V1

Chemical: (N,N-Dipropylamino) ethyl chloride hydrochloride

Synonym: 1-Propanamine, N-(2-chloroethyl)-N-propyl-hydrochloride
N-(2-Chloroethyl)-N-Propyl-1-propanamine hydrochloride
(2-Chloro-ethyl)-dipropyl-amine hydrochloride
Schedule: 2B
CAS No: 4535-86-8
Use: Scheduled precursor to V2

Chemical: .beta,.beta'-Bis(2-hydroxyethylthio) ethyl ether

See: Bis(2-hydroxyethylthioethyl)ether

Chemical: .beta.-(Diethylamino) ethyl chloride hydrochloride

See: (N,N-diethylamino) ethyl chloride hydrochloride

Chemical: .beta.-(Dimethylamino) ethyl chloride

See: 2-(N,N-Dimethylamino) ethyl chloride

Chemical: .beta.-mercaptoethanol

See: 2-Hydroxyethanethiol

Chemical: [3aS-(3.alpha.,4.alpha.10aR)]2,6, Diamino-4-[[(aminocarbonyl)oxy]

See: Saxitoxin

Chemical: 1,1'-(oxybis(methylene))bis(2-chloroethane)

See: Bis(2 chloroethylthiomethyl)ether

Chemical: 1,1'-Thiobisethene

See: Divinyl sulfide

Chemical: 1,1,3,3,3-Pentafluro-2-(trifluoromethyl)-1-propene

See: PFIB

Chemical: 1,1-[methylenebis(thio)]bis[2-chloroethane]

See: Bis(2-chloroethylthio)methane

Chemical: 1,2,2-trimethylpropyl ester

See: O-Pinacolyl isopropyl phosphonofluoridate

Chemical: 1,2-bis(2-chloroethylthio)ethane

See: Sesquimustard

Chemical: 1,2-Bis(2-hydroxyethylthio)ethane

CAS No: 524-43-8
Use: Unscheduled precursor to Sesquimustard
Chemical: 1,2-Dimenaptoethane
See: 1,2-Ethanedithiol

Chemical: 1,2-Dimethyldiphosphonic acid

Synonym: Methyl phosphonate, anhydride
Pyromix
Phosphonic acid, methyl-, anhydride
Diphosphonic acid, dimethyl
Methylphosphonic anhydride
Schedule: 2B
CAS No: 1070-90-2
Use: Scheduled precursor to DC, DIMP, and DF

Chemical: 1,2-Epoxyethane

See: Ethylene oxide

Chemical: 1,2-Ethanedithiol

Synonym: 1,2-Dimenaptoethane
Dithioglycol
1,2-Ethylenedithiol
a-Ethylene dimercaptan
CAS No: 540-63-6
Use: Unscheduled precursor to Sesquimustard

Chemical: 1,2-Ethylenedithiol

See: 1,2-Ethanedithiol

Chemical: 1,3,5-Trinitrophenol Picric acid

See: Picric acid

Chemical: 1,3-Bis(2-chloroethylthio)-n-propane

Schedule: 1A
CAS No: 63905-10-2
Synthesis: 1,3-Bis(2-hydroxyethylthio)-n-propane and Thionyl chloride
Use: Toxic chemical

Chemical: 1,3-Bis(2-hydroxyethylthio)-n-propane

CAS No: 16260-48-3
Use: Unscheduled precursor to 1,3-Bis(2-chloroethylthio)-n-propane

Chemical: 1,3-Dichloropropane

Synonym: Propane,1,3-dichloro
Trimethylene dichloride
CAS No: 142-28-9
Use: Unscheduled precursor to HD

Chemical: 1,4-Bis(2-chloroethylthio)-n-butane

Schedule: 1A
CAS No: 142868-93-7
Synthesis: 1,3-bis(2-hydroxyethylthio)butane and Thionyl chloride
Use: Toxic chemical

Chemical: 1,5-Bis(2-chloroethylthio)-n-pentane

Synonym: DCES 5
Pentane, 1,5-bis[(2-chloroethyl)thio]
Schedule: 1A
CAS No: 142868-94-8
Synthesis: 1,5-bis(2-hydroxyethylthiol)-n-pentane and T
Use: Toxic chemical

Chemical: 1,5-Dichloro-n-pentane

Synonym: Pentane,1,5-dichloro
1,5-Dichloropentane
CAS No: 628-76-2
Use: Unscheduled precursor to DCES 5

Chemical: 1,5-Dichloropentane

See: 1,5-Dichloro-n-pentane

Chemical: 1-Aminoethane

See: Ethylamine

Chemical: 1-Azabicyclo [2.2.2] octan-3-one

See: 3-Quinuclidinone

Chemical: 1-Azabicyclo[2,2,2]octan-3-one hydrochloride

See: 3-Quinuclidinone hydrochloride

Chemical: 1-Butanamine

See: Tributylamine

Chemical: 1-Carbethoxymethyl-4-carbethoxypiperidine

Synonym: 1-Piperidine, acetic acid, 4-(ethyoxycarbonyl)- ethyl ester
Ethyl 4-(ethoxycarbonyl)-1-piperdine acetic acid
1-Piperidineacetic acid, 4-carboxy-, diethyl ester
CAS No: 1838-39-7
Use: Unscheduled precursor to 3-Quinuclidinone hydrochloride

Chemical: 1-Chloro-2-(2-chloroethyldisulfanyl) ethane

See: Bis(2-chloroethyl) disulfide

Chemical: 1-Chloro-2-(2-chlortheylthio) ethane

See: Bis(2-chloroethyl)sulfide

Chemical: 1-Chloroethylene

See: Vinyl chloride

Chemical: 1-Hydroxy-2,4,6-trinitrobenzene

See: Picric acid

Chemical: 1-Methyl ethanol

See: Isopropanol

Chemical: 1-Piperdineacetic acid, 4-carboxy-, diethyl ester

See: 1-Carbethoxymethyl-4-carbethoxypiperidine

Chemical: 1-Piperidine, acetic acid, 4-(ethyoxycarbonyl)-ethyl ester

See: 1-Carbethoxymethyl-4-carbethoxypiperidine

Chemical: 1-Propanamine, N-(2-Chloroethyl)-N-propyl

See: 2-(N,N-Dipropylamino) ethyl chloride

Chemical: 1-Propanamine, N-(2-chloroethyl)-N-propyl-hydrochloride

See: (N,N-Dipropylamino) ethyl chloride hydrochloride

Chemical: 1-Propene,1,1,2,3,3,3-hexafluoro-

See: Perfluoropropylene

Chemical: 1070

See: HN3

Chemical: 1130

See: HN2

Chemical: 1149

See: HN1

Chemical: 2,2'-Dichloroethyldisulfide

See: Bis(2-chloroethyl) disulfide

Chemical: 2,2'-(oxybis(2,1-ethanediylthio)) bis ethanol

See: Bis(2-hydroxyethylthioethyl)ether

Chemical: 2,2'-[methylenedithio]diethanol

See: Bis(2-hydroxyethylthio)methane

Chemical: 2,2'-Iminodiethanol

See: Diethanolamine

Chemical: 2,2,2-Nitrilotriethanol

See: Triethanolamine

Chemical: 2,2,2-Trichlorthrethylene

See: HN3

Chemical: 2,2-(ethylimino)diethanol

See: Ethyldiethanolamine

Chemical: 2,2-(methylimino)diethanol

See: Methyldiethanolamine

Chemical: 2,2-Dihydroxydiethylsulfide

See: Bis(2-hydroxyethyl)sulfide

Chemical: 2,2-Dimethylbutan-3-ol

See: Pinacolyl alcohol

Chemical: 2,2-Dimethylbutane

Synonym: Butane, 2,2-dimethyl
CAS No: 75-83-2
Use: Unscheduled precursor to Pinacolyl alcohol

Chemical: 2,2-Diphenyl-2-hydroxyacetic acid

Synonym: Benzilic acid
Benzeneacetic acid hydroxy-.alpha.-phenyl-
Schedule: 2B
CAS No: 76-93-7
Synthesis: Benzoin, nitric acid, ethanol, NaOH, and water
Use: Scheduled precursor to BZ

Chemical: 2,3-Dimethyl-2,3-butanediol

Synonym: Pinacol
2,3-Dimethyl-2,3-dihydroxybutane
Pinacone
Tetramethylethylene glycol
CAS No: 76-09-5
Use: Unscheduled precursor to Pinacolone

Chemical: 2,3-Dimethyl-2,3-dihydroxybutane

See: 2,3-Dimethyl-2,3-butanediol

Chemical: 2,4,6-Trinitrophenol

See: Picric acid

Chemical: 2-(Bis(1-methylethyl) amino) ethanol

See: N,N-Diisopropyl-(beta)-aminoethanol

Chemical: 2-(Bis(1-methylethyl) amino) ethyl ethyl ester

See: O-Ethyl,2-diisopropyl aminoethyl methylphosphonate

Chemical: 2-(Dipropylamino)-ethanol

See: 2-(N,N-Dipropylamino) ethanol

Chemical: 2-(N,N,-Diisopropylamino) ethyl chloride

See: N,N-diisopropyl-(beta)-aminoethyl chloride

Chemical: 2-(N,N-Diethylamino) ethyl chloride

Synonym: (2-Chloroethyl)diethylamine
Ethanamine, 2-chloro-N,N-diethyl
Schedule: 2B
CAS No: 100-35-6
Use: Scheduled precursor to VE and VM

Chemical: 2-(N,N-Diisopropylamino) ethyl chloride hydrochloride

Synonym: (2-Chloroethyl) diisopropylamine hydrochloride
(.beta.-chloroethyl)diisopropylamine hydrochloride
Schedule: 2B
CAS No: 4261-68-1
Use: Scheduled precursor to VX, VS, V4, and V5

Chemical: 2-(N,N-Dimethylamino) ethyl chloride

Synonym: .beta.-(Dimethylamino) ethyl chloride
Chloro (dimethylamino) ethane
Dimethylaminoethyl chloride
Dimethyl (2-chloroethyl) amine
Schedule: 2B
CAS No: 107-99-3
Use: Scheduled precursor to V1

Chemical: 2-(N,N-Dipropylamino) ethanol

Synonym: Ethanol, 2-(dipropylamino)-
2-(Dipropylamino)-ethanol
Dipropylethanolamine
Schedule: 2B
CAS No: 3238-75-3
Use: Scheduled precursor to V2

Chemical: 2-(N,N-Dipropylamino) ethyl chloride

Synonym: (2-Chloroethyl)-dipropylamine
1-Propanamine, N-(2-Chloroethyl)-N-propyl
N-(2-chloroethyl)-N-propyl-1-propanamine
Schedule: 2B
CAS No: 36716-60-6
Use: Scheduled precursor to V2

Chemical: 2-2-Dichlorothrethylamine

See: HN1

Chemical: 2-Butanesulfonic acid, 3,3-dimethyl-

See: 3,3-Diemethylbutane-2-sulfonic acid

Chemical: 2-Butanone,3,3-dimethyl

See: Pinacolone

Chemical: 2-Butene,2-methyl-

See: 2-Methyl-2-butane

Chemical: 2-Chloro-2-methyl propane

See: t-Butyl chloride

Chemical: 2-Chloro-N,N-bis(2-chloroethyl) ethanamine hydrochloride

See: Tris(2-chloroethyl) amine hydrochloride

Chemical: 2-Chloroethanol

Synonym: 2-Hydroxyethyl chloride
Ethanol, 2-chloro-
Ethyl chlorohydrin
Ethylene chlorhydrin
CAS No: 107-07-3
Use: Unscheduled precursor to Thiodiglycol

Chemical: 2-Chloroethanyldichloroarsine
See: Lewisite 1

Chemical: 2-Chloroethyl chloromethyl triether

See: 2-Chloroethylchloromethylsulfide

Chemical: 2-Chloroethylchloromethylsulfide

Synonym: 2-chloroethylthiochloromethane
2-Chloroethyl chloromethyl triether
Schedule: 1A
CAS No: 2625-76-5
Synthesis: 2-hydroxyethanethiol and methylene chloride
Use: Toxic chemical

Chemical: 2-Chloroethylthiochloromethane

See: 2-Chloroethylchloromethylsulfide

Chemical: 2-Chlorotriethylamine hydrochloride

See: (N,N-diethylamino) ethyl chloride hydrochloride

Chemical: 2-Chlorovinyltrichlorosilane

Synonym: Silane, trichloro (1-chloroethenyl)-
Trichloro (1-chloroethenyl) silane
Silane, trichloro (1-chlorovinyl)-
CAS No: 2441-27-2
Use: Unscheduled precursor to L1-3

Chemical: 2-Chlorovinyldichloroarsine

See: Lewisite 1

Chemical: 2-Dimethylaminic ethyl chloride hydrochloride

See: (N,N-Dimethylamino) ethyl chloride hydrochloride

Chemical: 2-Hydroxy-1,2-diphenylethanone

See: Benzoin

Chemical: 2-Hydroxy-1-ethanethiol

See: 2-hydroxyethanethiol

Chemical: 2-Hydroxyethanethiol

Synonym: Ethanol, 2-mercapto-
2-Hydroxy-1-ethanethiol
.beta.-mercaptoethanol
CAS No: 60-24-2
Use: Unscheduled precursor to Bis(2-chloroethylthiomethyl)ether and Sesquimustard

Chemical: 2-Hydroxyethyl chloride

See: 2-Chloroethanol

Chemical: 2-Hydroxypropane

See: Isopropanol

Chemical: 2-Methyl-2-butane

Synonym: 2-Butane,2-methyl-
Amylene
Trimethylethylene
CAS No: 513-35-9
Use: Unscheduled precursor to Pinacolone

Chemical: 2-Propanamine, N-(1-Methylethyl)-

See: Diisopropylamine

Chemical: 2-Propanamine, N-(2-chloroethyl)-N-(1-methtlethyl)-

See: N,N-diisopropyl-(beta)-aminoethyl chloride

Chemical: 2-Propanol

See: Isopropanol

Chemical: 2-Propyl alcohol

See: Isopropanol

Chemical: 3,3-Diemethylbutane-2-sulfonic acid

Synonym: 2-Butanesulfonic acid, 3,3-dimethyl-
3,3-Dimethyl-2-butanesulfonic acid
CAS No: 135469-38-4
Use: Unscheduled precursor to Pinacolyl alcohol

Chemical: 3,3-Dimethyl-2-butanesulfonic acid

See: 3,3-Diemethylbutane-2-sulfonic acid

Chemical: 3,3-Dimethyl-2-butanone

See: Pinacolone

Chemical: 3,3-Dimethylbutane-2-ol

See: Pinacolyl alcohol

Chemical: 3-Benziloyl-1-azabicyclo[2.2.2] octane

See: BZ

Chemical: 3-Hydroxy-1-methylpiperdine

CAS No: 3554-74-3
Use: Unscheduled precursor to BZ

Chemical: 3-Hydroxy-azabicyclo [2.2.2]octane

See: Quinuclidine-3-ol

Chemical: 3-Oxyquinuclidine

See: 3-Quinuclidinone

Chemical: 3-Penten-2-one,4-methyl

See: Mesityl oxide

Chemical: 3-Q azabicyclo [2.2.2]-3-octanol

See: Quinuclidine-3-ol

Chemical: 3-Quinuclidinol

See: Quinuclidine-3-ol

Chemical: 3-Quinuclidinone

Synonym: 1-Azabicyclo [2.2.2] octan-3-one
3-Oxyquinuclidine
3-Quinuclidone
Quinuclidone
CAS No: 3731-38-2
Use: Unscheduled precursor to BZ

Chemical: 3-Quinuclidinone hydrochloride

Synonym: 1-Azabicyclo[2,2,2]octan-3-one hydrochloride
CAS No: 1193-65-3
Use: Unscheduled precursor to Quinuclidine-3-ol

Chemical: 3-Quinuclidinyl benzilate

See: BZ

Chemical: 3-Quinuclidone

See: 3-Quinuclidinone

Chemical: 3M Etching liquid

See:: Phosphoric acid

Chemical: 4-Methyl-3-penten-2-one

See: Mesityl oxide

Chemical: 4-Methylpyridine

Synonym: 4-Picoline
Pyridine, 4-methyl
CAS No: 109-89-4
Use: Unscheduled precursor to Isonicotinic acid

Chemical: 4-Picoline

See: 4-Methylpyridine

Chemical: 4-Pyridinecarboxylic acid

See: Isonicotinic acid

Chemical: 4-Pyridinecarboxylic acid, ethyl ester,

See: Ethyl isonicotinate

Chemical: a-Ethylene dimercaptan

See: 1,2-Ethanedithiol

Chemical: AC

See: Hydrogen cyanide

Chemical: Acetene

See: Ethylene

Chemical: Acetylene

Synonym: Ethine
Ethyne
Narcylen
Vinylene
CAS No: 74-86-2
Use: Unscheduled precursor to Lewisite 1

Chemical: Aetznatron

See: Sodium hydroxide

Chemical: Agri-sul

See: Sulfur

Chemical: Alcare hand degermer

See: Ethanol

Chemical: Alcohol

See: Ethanol

Chemical: Alcohol anhydrous

See: Ethanol

Chemical: Algrain

See: Ethanol

Chemical: Aluminum chloride

Synonym: Aluminum trichloride
CAS No: 7446-70-0
Use: Reaction catalyst in production of Lewisite 1; unscheduled precursor for “Perren-Kinnear” complex

Chemical: Aluminum lithium hydride

See: Lithium aluminum hydride

Chemical: Aluminum trichloride

See: Aluminum chloride

Chemical: Amino methane

See: Methylamine

Chemical: Amiton

Synonym: S-(2-diethylamino) ethyl,phosphoro-thioic acid O,O-Diethyl ester
DSDP
ENT 24
Inferno
Metramac
Tetram
R-5,150
Rhodia-6200
Schedule: 2A
CAS No: 78-53-5
Synthesis: 2-(N,Ndiethylamino) ethanol and O,Odiethyl phosphorothionochloridate
Catalyst: NaH, benzene, ethyl acetate, sodium sulfate, oxalic acid, ethanol, or ethyl ether
Use: Toxic chemical

Chemical: Ammonia

Synonym: Nitrosil
R 717
Spirit of Hartshorn
Ammonia gas
Ammonia 14 N
Refrigerant R717
CAS No: 7664-41-7
Use: Unscheduled precursor to Triethanolamine; reaction catalyst in production of Diethyl methylphosphonite

Chemical: Ammonia 14 N

See: Ammonia

Chemical: Ammonia gas

See: Ammonia

Chemical: Amylene

See: 2-Methyl-2-butane

Chemical: Anhydrol

See: Ethanol

Chemical: Anhydrous hydrochloric acid

See: Hydrochloric acid (HCl)

Chemical: Anhydrous hydrofluoric acid

See: Hydrogen fluoride

Chemical: Antisal 2b

See: Hydrogen fluoride

Chemical: Arsenic trichloride

Synonym: Trichloroarsine
Butter of arsenic
Fuming liquid arsenic
Arsenous trichloride
Schedule: 2B
CAS No: 7784-34-1
Synthesis: 1) arsenic trioxide and sulfur monochloride; 2) arsenic trioxide and thionyl chloride; 3) arsenic trixoide and hydrochloric acid
Use: Scheduled precursor to Lewisite 1

Chemical: Arsenic trioxide

CAS No: 1627-53-3
Use: Unscheduled precursor to Arsenic trichloride

Chemical: Arsenous trichloride

See: Arsenic trichloride

Chemical: Artic

See: Methyl chloride

Chemical: Ascarite

See: Sodium hydroxide

Chemical: Asulfa-supra

See: Sulfur

Chemical: Atomic sulfur

See: Sulfur

Chemical: BCME

See: Bis(chloromethyl)ether

Chemical: Benzeneacetic acid,.alpha.-hydroxy-.alpha.-phenyl-

See: 2,2-Diphenyl-2-hydroxyacetic acid

Chemical: Benzenemethanol, alpha-diphenyl-

See: Triphenylcarbinol

Chemical: Benzil

Synonym: Dibenzoyl
Bibenzoyl
Diphenylglyoxal
Ethanedione, diphenyl
CAS No: 134-81-6
Use: Unscheduled precursor to Benzilic acid; degradati

Chemical: Benzilic acid

See: 2,2-Diphenyl-2-hydroxyacetic acid

Chemical: Benzilic acid, methyl ester

See: Methyl benzilate

Chemical: Benzoin

Synonym: Ethanone, 2-hydroxyl-1,2-diphenyl
2-Hydroxy-1,2-diphenylethanone
Benzoylphenylcarbinol
Ethanone,2-hydroxy-1,2-diphenyl
CAS No: 119-53-9
Use: Unscheduled precursor to Benzilic acid

Chemical: Benzoylphenylcarbinol

See: Benzoin

Chemical: Bertholite

See: Chlorine

Chemical: beta-beta'-Dihydroxydiethyl sulfide

See: Bis(2-hydroxyethyl)sulfide

Chemical: BFV

See: Formaldehyde

Chemical: Bialeski's solution

See: Methanol

Chemical: Bibenzoyl

See: Benzil

Chemical: Bicarburretted hydrogen

See: Ethylene

Chemical: Biogas

See: Methane

Chemical: Bis(2-[bis(1-methylethyl) amino] ethyl) ester

See: Bis(2-diisopropylamino ethyl) methylphosphonite

Chemical: Bis(2-diisopropylamino ethyl) methylphosphonite

Synonym: LT
Phosphonous acid, methyl-Bis(2-[bis(1-methylethyl) amino] ethyl) ester
Schedule: 2B
CAS No: 57856-12-9
Use: Scheduled precursor to VX

Chemical: Bis(1,2,2-trimethylpropyl) methyl phosphonate

See: O,O-Dipinacolyl methylphosphonate

Chemical: Bis(2-chloroethyl) disulfide

Synonym: 1-Chloro-2-(2-chloroethyldisulfanyl) ethane
2,2'-Dichloroethyldisulfide
Disulfide, bis(2-chloroethyl)
CAS No: 1002-41-1
Use: Byproduct of HD

Chemical: Bis(2-chloroethyl)ethylamine

See: HN1

Chemical: Bis(2-chloroethyl)methylamine

See: HN2

Chemical: Bis(2-chloroethyl)sulfide

Synonym: Mustard gas
H
HS
Yperite
Mustard Oil (M.O.)
D-Lost
Yellow Cross
Bis(2-chloroethyl)thioether
1-Chloro-2-(2-chlortheylthio) ethane
Schedule: 1A
CAS No: 505-60-2
Synthesis: 1) thiodiglycol and gaseous HCl; 2) sulfur monochloride and dry ethylene; 3) sulfur monochloride and pure ethylene; 4) sulfur dichloride in carbon tetrachloride and ethylene; 5) sulfur monochloride and ethylene saturated with alcohol
Use: Toxic chemical

Chemical: Bis(2-chloroethyl)thioether

See: Bis(2-chloroethyl)sulfide

Chemical: Bis(2-chloroethylthio)methane

Synonym: DCES 1
Ethane, 1,1'-(methylenebis(thio))bis(2-chloro-
1,1-[methylenebis(thio)]bis[2-chloroethane]
Schedule: 1A
CAS No: 63869-13-6
Synthesis: Bis(2-hydroxyethylthio)methane and thionyl chloride
Use: Toxic chemical

Chemical: Bis(2-chloroethylthioethyl)ether

See: O-Mustard

Chemical: Bis(2-chloroethylthiomethyl)ether

Synonym: DCES MO
Ethane, 1,1'-(oxybis(methylenethio))bis(2-chloro-
1,1'-(oxybis(methylene))bis(2-chloroethane)
Schedule: 1A
CAS No: 63918-90-1
Synthesis: 1) bis(2-hydroxyethylthioethyl)ether and thionyl chloride; 2) 2-hydroxyethanethiol and bis(chloromethyl)ether
Use: Toxic chemical

Chemical: Bis(2-chlorovinyl)chloroarsine

See: Lewisite 2

Chemical: Bis(2-hydroxyethyl)sulfide

Synonym: Thiodiglycol
Thiodiethylene glycol
2,2-Dihydroxydiethylsulfide
Glyecine A
EA 1019
Tedegyl
beta-beta'-Dihydroxy-diethyl sulfide
Kromfax solvent
Schedule: 2B
CAS No: 111-48-8
Use: Scheduled precursor to Mustard gas, Sesquimustard, HT, T, and Q

Chemical: Bis(2-hydroxyethylthio)methane

Synonym: Bis[(2-hydroxyethyl)thio]methane
2,2'-[methylenedithio]diethanol
Ethanol, 2,2'-(methylenebis(thio))bis-
CAS No: 44860-68-6
Use: Unscheduled precursor to Bis(2-chloroethylthio)methane

Chemical: Bis(2-hydroxyethylthioethyl)ether

Synonym: .beta,.beta'-Bis(2-hydroxyethylthio) ethyl ether
2,2'-(oxybis(2,1-ethanediylthio)) bis ethanol
Ethanol,2,2'-(oxybis(2,1-ethanediylthio))bis
CAS No: 7426-02-0
Use: Unscheduled precursor to Bis(2-chloroethylthio)methane

Chemical: Bis(chloromethyl)ether

Synonym: Methane, oxybis(chloro-
Oxybis(chloromethane)
BCME
Bis-CME
Chloromethyl ether
CAS No: 542-88-1
Use: Unscheduled precursor to Bis(2-chloroethylthiomethyl(ether)

Chemical: Bis-CME

See: Bis(chloromethyl)ether

Chemical: Bis[(2-hydroxyethyl)thio]methane

See: Bis(2-hydroxyethylthio)methane

Chemical: Bisulfoid

See: Sulfur

Chemical: Blausaeure

See: Hydrogen cyanide

Chemical: Blauwzuer

See: Hydrogen cyanide

Chemical: Blsyra

See: Hydrogen cyanide

Chemical: Borate, tetrahydro-, sodium

See: Sodium borohydride

Chemical: Bromine cyanide

See: Cyanogen bromide

Chemical: Bromine monocyanide

See: Cyanogen bromide

Chemical: Bromocyan

See: Cyanogen bromide

Chemical: Bromophenylmagnesium

See: Phenyl magnesium bromide

Chemical: Brown no.1

See: Hydrogen cyanide

Chemical: Butane, 2,2-dimethyl

See: 2,2-Dimethylbutane

Chemical: Butter of arsenic

See: Arsenic trichloride

Chemical: BZ

Synonym: 3-quinuclidinyl benzilate
3-benziloyl-1-azabicyclo[2.2.2] octane
Schedule: 2A
CAS No: 6581-11-1
Synthesis: 3-quinuclidinol and benzilic acid
Catalyst: Sodium methylate
Use: Toxic chemical

Chemical: Campilit

See: Cyanogen bromide

Chemical: Carbinamine

See: Methylamine

Chemical: Carbinol

See: Methanol

Chemical: Carbon bisulfide

See: Carbon disulfide

Chemical: Carbon disulfide

Synonym: Carbon disulphide
Carbon bisulfide
Carbon sulfide
NCI-CO4591
Sulphuret of Carbon
CAS No: 75-15-0
Use: Stabilizer for HN2 and HN3

Chemical: Carbon disulphide

See: Carbon disulfide

Chemical: Carbon sulfide

See: Carbon disulfide

Chemical: Carbonic acid, disodium salt

See: Sodium carbonate

Chemical: Carbonyl dichloride

See: Phosgene

Chemical: Caustic soda

See: Sodium hydroxide

Chemical: Chemifluor

See: Sodium fluoride

Chemical: Chlorine

Synonym: Bertholite
Chlorine molecule
Chlorine molecule (Cl2)
Diatomic chlorine
Dichlorine
Molecular chlorine
CAS No: 7782-50-5
Use: Unscheduled precursor to GB, GD, GF, and HD

Chemical: Chlorine cyanide

See: Cyanogen chloride

Chemical: Chlorine molecule

See: Chlorine

Chemical: Chlorine molecule (Cl2)

See: Chlorine

Chemical: Chlorine sulfide

See: Sulfur dichloride

Chemical: Chloro (dimethylamino) ethane

See: 2-(N,N-Dimethylamino) ethyl chloride

Chemical: Chloro GD

See: Chlorosoman

Chemical: Chlorobis(2-chlorovinyl)arsine

See: Lewisite 2

Chemical: Chlorocyan

See: Cyanogen chloride

Chemical: Chlorocyanide

See: Cyanogen chloride

Chemical: Chlorocyanogen

See: Cyanogen chloride

Chemical: Chloroethene VCL

See: Vinyl chloride

Chemical: Chloroethylene

See: Vinyl chloride

Chemical: Chlorohydric acid

See: Hydrochloric acid (HCl)

Chemical: Chloromethane

See: Methyl chloride

Chemical: Chloromethyl ether

See: Bis(chloromethyl)ether

Chemical: Chlorophosphonothioic acid O,O-diethyl ester

See: O,O-Diethyl phosphorothionochloridate

Chemical: Chloropicrin

Synonym: Trichloronitromethane
Nitrochloromethane
Nitrochloroform
Schedule: 3A
CAS No: 76-06-2
Synthesis: Picric acid (2,4,6-trinitrophenol) and calcium hypochlorite bleach or lime, bleach, stannic chloride
Use: Incapacitating agent; tear gas formulations

Chemical: Chlorosarin

Synonym: O-Isopropyl methylphosphonochloridate
Schedule: 1B
CAS No: 1445-76-7
Synthesis: DIMP, O-O-diisopropyl methylphosphonate
Use: Scheduled precursor to Sarin

Chemical: Chlorosoman

Synonym: O-Pinacolyl methylphosphonochloridate
Chloro GD
Schedule: 1B
CAS No: 7040-57-5
Synthesis: methyl-phosphonic dichloride and pinacol
Use: Scheduled precursor to Soman

Chemical: Clocat F

See: Potassium fluoride

Chemical: Colamine

See: Ethanolamine

Chemical: Copper (II) chloride

See: Cupric chloride

Chemical: Copper chloride (CuCl2)

See: Cupric chloride

Chemical: Corrosive sublimate

See: Mercuric chloride

Chemical: Cosan 80

See: Sulfur

Chemical: Cupric chloride

Synonym: Copper (II) chloride
Copper chloride (CuCl2)
CAS No: 7447-39-4
Use: Unscheduled precursor to L

Chemical: CV

See: O-Ethyl O-2-Diisopropulaminoethyl methylphosphonothionate

Chemical: Cyanide of sodium

See: Sodium cyanide

Chemical: Cyanogen bromide

Synonym: Cyanogen bromide ((CN)
BR)
Bromine cyanide
Bromine monocyanide
Bromocyan
Campilit
CAS No: 506-68-3
Use: Unscheduled precursor to Tabun

Chemical: Cyanogen bromide ((CN) BR)

See: Cyanogen bromide

Chemical: Cyanogen chloride

Synonym: Chlorocyan
Chlorocyanide
Chlorocyanogen
Chlorine cyanide
Schedule: 3A
CAS No: 506-77-4
Synthesis: 1) potassium-zinccyanide complex and chlorine gas; 2) nitrogen and carbon tetrachloride; 3) sodium cyanide and chlorine; 4) hydrogen cyanide and chlorine
Use: Toxic chemical

Chemical: Cyanohydrin

formaldehyde
See: Hydroxyacetonitrile

Chemical: Cyanomethanol

See: Hydroxyacetonitrile

Chemical: Cymag

See: Sodium cyanide

Chemical: Cynogran

See: Sodium cyanide

Chemical: D-Lost

See: Bis(2-chloroethyl)sulfide

Chemical: DC

See: Methylphosphonyl dichloride

Chemical: DCES 1

See: Bis(2-chloroethylthio)methane

Chemical: DCES 5

See: 1,5-Bis(2-chloroethylthio)-npentane

Chemical: DCES MO

See: Bis(2-chloroethylthiomethyl)ether

Chemical: DDPNA

See: Diethyl N,N-dimethyl phosphoramidate

Chemical: DEA

See: Diethanolamine

Chemical: Decon 4512

See: Phosphoric acid

Chemical: DEDMPNA

See: Diethyl N,N-dimethyl phosphoramidate

Chemical: DEEP

See: Diethyl ethylphosphonate

Chemical: DEHP

See: Diethyl phosphite

Chemical: DEPCl

See: Diethylphosphorachloridite

Chemical: DF

See: Methylphosphonyl difluoride

Chemical: Di-npropylphosphoramidic dichloride

See: N,N Dipropylphosphoramidic dichloride

Chemical: Diatomic chlorine

See: Chlorine

Chemical: Dibenzoyl

See: Benzil

Chemical: Dichlor

See: Methylphosphonyl dichloride

Chemical: Dichlorine

See: Chlorine

Chemical: Dichloroethylphosphine oxide

See: Ethylphosphonic dichloride

Chemical: Dichloromethane

See: Methylene dichloride

Chemical: Dichloromethylphosphine sulfide

See: Methylphosphonothioic dichloride

Chemical: Dichlorosulfane

See: Sulfur dichloride

Chemical: Dichloro ethyl phosphine

See: Ethylphosphonous dichloride

Chemical: Diethanol amine

See: Diethanolamine

Chemical: Diethanolamine

Synonym: Ethanol,2,2'-iminobis-
Diethanol amine
2,2'-Iminodiethanol
DEA
Diolamine
CAS No: 111-42-2
Use: Unscheduled precursor to HN1 and HN2

Chemical: Diethoxylethylphosphine oxide

See: Diethyl ethylphosphonate

Chemical: Diethyl (2-mercaptoethyl) amine

See: N,N-Diethylaminoethanethiol

Chemical: Diethyl chlorophosphite

See: Diethylphosphorachloridite

Chemical: Diethyl dimethylphosphoramidate

See: Diethyl N,N-dimethyl phosphoramidate

Chemical: Diethyl dimethylphosphoramidite

See: O,O-Diethyl N,Ndimethylphosphoramidite

Chemical: Diethyl dimethylphosphoramidous acid

See: O,O-Diethyl N,Ndimethylphosphoramidite

Chemical: Diethyl ethylphosphonate

Synonym: DEEP
Phosphonic acid, ethyl-, diethyl ester
Diethoxylethylphosphine oxide
Schedule: 2B
CAS No: 78-38-6
Use: Scheduled precursor to Ethylsarin

Chemical: Diethyl methylphosphonite

Synonym: TR
O,O-Diethyl ester of methlphosphonus acid
Schedule: 2B
CAS No: 15715-41-0
Synthesis: Methylephosphonus dichloride and ethanol
Catalyst: Ammonia
Use: Scheduled precursor to QL

Chemical: Diethyl methylphosphonothionate

See: O,O Diethyl methylphosphonothionate

Chemical: Diethyl N,N-dimethyl phosphoramidate

Synonym: DEDMPNA
DDPNA
Diethyl N,Ndimethylphosphoramidate
Diethyl dimethylphosphoramidate
Schedule: 2B
CAS No: 2404-03-7
Use: Scheduled precursor to Tabun

Chemical: Diethyl N,Ndimethylphosphoramidate

See: Diethyl N,N-dimethyl phosphoramidate

Chemical: Diethyl phosphite

Synonym: Diethylphosphite
DEHP
Diethyl phosphonate
Schedule: 3B
CAS No: 762-04-9
Synthesis: Phosphorous trichloride and ethanol
Catalyst: NaOH
Use: Scheduled precursor to VG, Sarin, Soman, and GF

Chemical: Diethyl phosphonate

See: Diethyl phosphite

Chemical: Diethyl phosphorochloridate

See: O,O Diethylphosphorochloridate

Chemical: Diethyl phosphorothiochloridate

See: O,O-Diethyl phosphorothionochloridate

Chemical: Diethyl sodium phosphite

See: Sodium O,O-diethyl phosphite

Chemical: Diethyl sodium phosphonate

See: Sodium O,O-diethyl phosphite

Chemical: Diethylamine

Synonym: N-Ethylethanamine
Ethanamine, N-ethyl-
CAS No: 109-89-7
Use: Unscheduled precursor to 2-(N,N-diethylamino)ethanol

Chemical: Diethylcysteamine

See: N,N-Diethylaminoethanethiol

Chemical: Diethylene glycol

CAS No: 111-46-6
Use: Unscheduled reaction catalyst in production of DMMP

Chemical: Diethylphosphorachloridite

Synonym: DEPCI
Phosphorochloridous acid, diethyl ester
Diethyl chlorophosphite
Ethyl phosphorochloridite
CAS No: 589-57-1
Use: Unscheduled precursor to Tabun

Chemical: Difluor

See: Methylphosphonyl difluoride

Chemical: Difluor (ethyl) phosphine

See: Ethylphosphonous difluoride

Chemical: DIHP

Synonym: Diisopropyl phosphite
CAS No: 1809-20-9
Use: Unscheduled precursor to DIMP

Chemical: Diisopropyl ester of methylphosphonic acid

See: DIMP

Chemical: Diisopropyl hydrogen phosphonate

See: O,O-Diisopropyl hydrogenphosphonate

Chemical: Diisopropyl phosphinate

See: Diisopropyl phosphonate

Chemical: Diisopropyl phosphite

See: DIHP

Chemical: Diisopropyl phosphonate

Synonym: Phosphonic acid, diisopropyl ester
Phosphonic acid, bis(1-methyl ethyl)
ester
Isopropyl isopropylphosphinate
Diisopropyl phosphinate
CAS No: 1809-20-7
Use: Unscheduled precursor to Sarin,
GE, and DIMP

Chemical: Diisopropylamine

Synonym: DIPA
N,N-Diisopropylamine
2-Propanamine, N-(1-Methylethyl)-
CAS No: 108-18-9
Use: VX

Chemical: Diisopropylaminoethanethiol

See: N,N-Diisopropylaminoethanethiol

Chemical: Dilute hydrochloric acid

See: Hydrochloric acid (HCl)

Chemical: Dimethyl (2-chloroethyl) amine

See: 2-(N,N-Dimethylamino) ethyl chloride

Chemical: Dimethyl amine

See: Dimethylamine

Chemical: Dimethyl ester of methylphosphonic acid

See: Dimethyl methylphosphonate

Chemical: Dimethyl ethanephosphonate

See: Dimethyl ethylphosphonate

Chemical: Dimethyl ethylphosphonate

Synonym: Ethane phosphonic acid,
dimethyl ester
Phosphonic acid, ethyl-, dimethyl ester
Dimethyl ethanephosphonate
CAS No: 6163-75-3
Use: Ethyl sarin

Chemical: Dimethyl methylphosphonate

Synonym: DMMP
Dimethyl ester of methylphosphonic acid
Schedule: 2B
CAS No: 756-79-6
Synthesis: 1) DMHP, methyl Chloride, and metallic sodium; 2) trimethyl phosphite
Catalyst: 1) Diethylene glycol; 2) methyl iodide
Use: Scheduled precursor to DC

Chemical: Dimethylamine

Synonym: Dimethyl amine
Methanamine, N-methyl-
N,N-Dimethylamine
N-Methylmethanamine
CAS No: 124-40-3
Use: Unschedule precursor to Tabun

Chemical: Dimethylamine HCl

Synonym: Dimethylamine hydrochloride
Dimethylammonium chloride
Methanamine, N-methyl-, hydrochloride
N-Methylmethanamine hydrochloride
CAS No: 506-59-2
Use: Unscheduled precursor to Tabun

Chemical: Dimethylamine hydrochloride

See: Dimethylamine HCl

Chemical: Dimethylaminoethyl chloride

See: 2-(N,N-Dimethylamino) ethyl chloride

Chemical: Dimethylaminoethyl chloride hydrochloride

See: (N,N-Dimethylamino) ethyl chloride hydrochloride

Chemical: Dimethylammonium chloride

See: Dimethylamine HCl

Chemical: dimethylene oxide

See: Ethylene oxide

Chemical: Dimethyl phosphite

Synonym: DMHP
O,O-Dimethylphosphonate
Schedule: 3B
CAS No: 868-85-9
Synthesis: Phosphorous trichloride and methanol
Catalyst: Methyl chloride
Use: Scheduled precursor to DMMP

Chemical: Dimethylphosphoramidic dicyanide

See: N,N-Dimethylphosphoramidic dicyanide

Chemical: DIMP

Synonym: O-O-diisopropyl methylphosphonate
Diisopropyl ester of methylphosphonic acid
Schedule: 2B
CAS No: 1445-75-6
Synthesis: DIHP, metallic sodium and methyl chloride
Catalyst: Diethylene glycol
Use: Scheduled precursor to Chlorosarin

Chemical: Diolamine

See: Diethanolamine

Chemical: DIPA

See: Diisopropylamine

Chemical: Diphenylglycolic acid methyl ester

See: Methyl benzilate

Chemical: Diphenylglyoxal

See: Benzil

Chemical: Diphosgene

CAS No: 503-38-8
Use: Unscheduled precursor to Phosgene

Chemical: Diphosphonic acid, dimethyl

See: 1,2-Dimethyldiphosphonic acid

Chemical: Dipropylethanolamine

See: 2-(N,N-Dipropylamino) ethanol

Chemical: Disodium monosulfide

See: Sodium sulfide

Chemical: Disodium sulfide

See: Sodium sulfide

Chemical: Disulfide, bis(2-chloroethyl)

See: Bis(2-chloroethyl) disulfide

Chemical: Disulfur dichloride

See: Sulfur monochloride

Chemical: Dithioglycol

See: 1,2-Ethanedithiol

Chemical: Divinyl sulfide

Synonym: 1,1'-Thiobisethene
Divinyl thioether
Vinyl sulfide
Vinylsulfanylene
CAS No: 627-51-0
Use: Unscheduled precursor to HD

Chemical: Divinyl thioether

See: Divinyl sulfide

Chemical: DMHP

See: Dimethyl phosphite

Chemical: DMMP

See: Dimethyl methylphosphonate

Chemical: Doppel-O

See: Sesquimustard

Chemical: DPMP

See: O,O-Dipinacolyl methylphosphonate

Chemical: DSDP

See: Amiton

Chemical: E-DC

See: Ethylphosphonic dichloride

Chemical: E-DF

See: Ethylphosphonyl difluoride

Chemical: E-GD

See: O-Pinacolyl ethylphosphonofluoridate

Chemical: EA 1019

See: Bis(2-hydroxyethyl)sulfide

Chemical: EA 2192

See: S-2-Diisopropylaminoethyl methylphosphonothioic acid

Chemical: EDMPNC

See: O-Ethyl N,N-dimethyl phosphoramidochloridate

Chemical: Elayl

See: Ethylene

Chemical: English Lost

See: O-Mustard

Chemical: ENT 24

See: Amiton

Chemical: Ethanamine

See: Ethylamine

Chemical: Ethanamine, 2-chloro-N,N-bis(2-chloroethyl)

See: Tris(2-chloroethyl) amine hydrochloride

Chemical: Ethanamine, 2-chloro-N,N-diethyl

See: 2-(N,N-Diethylamino)ethyl chloride

Chemical: Ethanamine, N-ethyl-

See: Diethylamine

Chemical: Ethane phosphonic acid, dimethyl ester

See: Dimethyl ethylphosphonate

Chemical: Ethane, 1,1'-(methylenebis(thio))bis(2-chloro-

See: Bis(2-chloroethylthio)methane

Chemical: Ethane, 1,1'-(oxybis(methylenethio))bis(2-chloro-

See: Bis(2-chloroethylthiomethyl)ether

Chemical: Ethane, tetrafluoro-

See: Tetrafluoroethylene

Chemical: Ethanedione, diphenyl

See: Benzil

Chemical: Ethanephosphonyl chloride

See: Ethylphosphonic dichloride

Chemical: Ethanethiol, 2-(diethylamino)

See: N,N-Diethylaminoethanethiol

Chemical: Ethanethiol, 2-(diisopropylamino)-

See: N,Ndiisopropylaminoethanethiol

Chemical: Ethanol

Synonym: Alcare hand degermer
Alcohol
Alcohol anhydrous
Algrain
Anhydrol
CAS No: 64-17-5
Use: Unscheduled precursor to BZ, Diethyl phosphite, and Triethyl phosphite

Chemical: Ethanol, 2,2',2", -

nitrilotris-, hydrochloride
See: Triethanolamine hydrochloride (HN-3)

Chemical: Ethanol, 2,2'-(methylenebis(thio))bis-

See: Bis(2-hydroxyethylthio)methane

Chemical: Ethanol, 2-(bis(1-methylethyl)amino)

See: N,N-diisopropyl-(beta)-aminoethanol

Chemical: Ethanol, 2-(dipropylamino)-

See: 2-(N,N-Dipropylamino) ethanol

Chemical: Ethanol, 2-chloro-

See: 2-Chloroethanol

Chemical: Ethanol, 2-mercapto-

See: 2-Hydroxyethanethiol

Chemical: Ethanol,2,2'-(oxybis(2,1- ethanediylthio))bis

See: Bis(2-hydroxyethylthioethyl)ether

Chemical: Ethanol,2,2'-iminobis-

See: Diethanolamine

Chemical: Ethanol,2-amino-

See: Ethanolamine

Chemical: Ethanolamine

Synonym: Ethanol,2-amino-
Colamine
Ethylolamine
Glycinol
MEA
MEA (alcohol)
CAS No: 141-43-5

Chemical: Ethanone, 2-hydroxyl-1,2-diphenyl

See: Benzoin

Chemical: Ethanone,2-hydroxy-1,2- diphenyl

See: Benzoin

Chemical: Ethene

See: Ethylene

Chemical: Ethene, tetrafluoro-, homopolymer

See: Polytetrafluoroethylene

Chemical: Ethine

See: Acetylene

Chemical: Ethoxymethylphosphine oxide

See: O-Ethyl methyl phosphinic acid

Chemical: Ethyl 4-(ethyoxycarbonyl)-1-piperdine acetic acid

See: 1-Carbethoxymethyl-4-carbethoxypiperidine

Chemical: Ethyl chlorohydrin

See: 2-Chloroethanol

Chemical: Ethyl difluorophosphite

See: Ethylphosphonyl difluoride

Chemical: Ethyl GB

See: O-Isopropyl ethylphosphonofluoridate

Chemical: Ethyl GD

See: O-Pinacolyl ethylphosphonofluoridate

Chemical: Ethyl isonicotinate

Synonym: 4-Pyridinecarboxylic acid, ethyl ester,
gamma-Piridine carboxylic acid, ethyl ester
CAS No: 1570-45-2
Use: Unscheduled precursor to 3-Quinuclidinone hydrochloride

Chemical: Ethyl methylphosphinate

See: O-Ethyl methyl phosphinic acid

Chemical: Ethyl N,N-dimethylphosphoramidochloridate

See: O-Ethyl N,N-dimethyl phosphoramidochloridate

Chemical: Ethyl phosphine dichloride

See: Ethylphosphonous dichloride

Chemical: Ethyl phosphinyl difluoride

See: Ethylphosphonous difluoride

Chemical: Ethyl phosphonic difluoride

See: Ethylphosphonyl difluoride

Chemical: Ethyl phosphonyl dichloride

See: Ethylphosphonic dichloride

Chemical:
Ethyl phosphorochloridite

See: Diethylphosphorachloridite

Chemical: Ethyl ThioMPA

See: O-Ethyl
methylphosphonothiolic acid

Chemical: Ethyl-S

See: HN1

Chemical: Ethylamine

Synonym: 1-Aminoethane
Ethanamine
Monoethylamine
n-Ethylamine
CAS No: 75-04-7
Use: Unscheduled precursor to HN1

Chemical: Ethyldiethanolamine

Synonym: 2,2-(ethylimino)diethanol
N-ethyl-2-2-iminodiethanol
Schedule: 3B
CAS No: 139-87-7
Synthesis: Ethylamine with ethylene oxide
Use: Scheduled precursor to HN1

Chemical:
Ethyldifluorophosphine

See: Ethylphosphonous difluoride

Chemical: Ethylene

Synonym: Ethene
Acetene
Bicarburretted hydrogen
Elayl
Olefiant gas
CAS No: 74-85-1
Use: Unscheduled precursor to HD

Chemical: Ethylene chlorhydrin

See: 2-Chloroethanol

Chemical: Ethylene oxide

Synonym: dimethylene oxide
1,2-Epoxyethane
oxiran
CAS No: 75-21-8
Use: Unscheduled precursor to Triethanolamine,
2-(N,Ndiethylamino)
ethanol

Chemical: Ethylolamine

See: Ethanolamine

Chemical: Ethylphosphonic dichloride

Synonym: E-DC
Dichloroethylphosphine oxide
Ethanephosphonyl chloride
Ethyl phosphonyl dichloride
CAS No: 1066-50-8
Use: Ethyl sarin

Chemical:
Ethylphosphonous dichloride

Synonym: Phosphonous dichloride, ethyl-
Dichloro ethyl phosphine
Ethyl phosphine dichloride
CAS No: 1498-40-4
Use: VE, VS, and Ethyl sarin

Chemical:
Ethylphosphonous difluoride

Synonym: Difluor (ethyl) phosphine
Ethyl phosphinyl difluoride
Ethyldifluorophosphine
Phosphonous, difluoride, ethyl-
CAS No: 430-78-4
Use: VE and Ethyl sarin

Chemical:
Ethylphosphonyl difluoride

Synonym: Ethyl phosphonic difluoride
Ethyl difluorophosphite
E-DF
CAS No: 753-98-0
Use: Ethyl sarin

Chemical: Ethylsarin

See: O-Isopropyl
ethylphosphonofluoridate

Chemical: Ethylsoman

See: O-Pinacolyl
ethylphosphonofluoridate

Chemical: Ethyne

See: Acetylene

Chemical: EVITs

See: Phosphoric acid

Chemical: FA

See: Formaldehyde

Chemical: Fannoform

See: Formaldehyde

Chemical: FDA 0101

See: Sodium fluoride

Chemical: Floguard 1015

See: Formaldehyde

Chemical: Floridine

See: Sodium fluoride

Chemical: Fluohydric acid gas

See: Hydrogen fluoride

Chemical: Fluohydric gas

See: Hydrogen fluoride

Chemical: Fluorigard

See: Sodium fluoride

Chemical: Fluorol

See: Sodium fluoride

Chemical: Flursol

See: Sodium fluoride

Chemical: FM 282

See: Formaldehyde

Chemical: Formaldehyde

Synonym: BFV
FA
FM 282
Fannoform
Floguard 1015
CAS No: 50-00-0
Use: Unscheduled precursor to HN2

Chemical: Fuming liquid arsenic

See: Arsenic trichloride

Chemical: g-Picolinic acid

See: Isonicotinic acid

Chemical: g-Pyridinecarboxylic acid

See: Isonicotinic acid

Chemical: GA

See: Tabun

Chemical: gamma-Piridine carboxylic acid, ethyl ester

See: Ethyl isonicotinate

Chemical: GB

See: Sarin

Chemical: GD

See: Soman

Chemical: GE

See: O-Isopropyl ethylphosphonofluoridate

Chemical: Glycinol

See: Ethanolamine

Chemical: Glycolonitrile

See: Hydroxyacetonitrile

Chemical: Glyecine A

See: Bis(2-hydroxyethyl)sulfide

Chemical: H

See: Bis(2-chloroethyl)sulfide

Chemical: Hexafluoropropylene

See: Perfluoropropylene

Chemical: HN1

Synonym: Bis(2-chloroethyl)ethylamine
1149
2-2-Dichlorothrethylamine
Ethyl-S
T-1790
Schedule: 1A
CAS No: 538-07-8
Synthesis: Ethyl diethanolamine and thionyl chloride
Catalyst: Benzene; chloroform or ethylene chloride
Use: Toxic chemical

Chemical: HN2

Synonym: Bis(2-chloroethyl)methylamine
1130
S
Schedule: 1A
CAS No: 51-75-2
Synthesis: Methyl diethanolamine and thionyl chloride
Catalyst: Ethylene dichloride or chloroform
Use: Toxic chemical

Chemical: HN3

Synonym: Tris(2-chloroethyl)amine
2,2,2-Trichlorthrethylene
Nitrogen Mustard
1070
Nitrogen yperite
Nitrogen Lost
T9
TBA
Schedule: 1A
CAS No: 555-77-1
Synthesis: Triethanolamine and thionyl chloride
Catalyst: Benzene
Use: Toxic chemical

Chemical: HS

See: Bis(2-chloroethyl)sulfide

Chemical: Hydrochloric acid (HCl)

Synonym: Anhydrous hydrochloric acid
Chlorohydric acid
Dilute hydrochloric acid
CAS No: 7647-01-0
Use: Unscheduled precursor to Arsenic trichloride

Chemical: Hydrocyanic acid, sodium salt

See: Sodium cyanide

Chemical: Hydrogen cyanide

Synonym: AC
Blausaeure
Blauwzuer
Blsyra
Brown no.1
Schedule: 3B
CAS No: 74-90-8
Synthesis: 1) ammonia, methane, and hydrogen; 2) ammonia and methane in the absence of air; 3) hydrogen, nitrogen, and coal
Catalyst: 1) platinum; 2) platinum
Use: Toxic chemical

Chemical: Hydrogen fluoride

Synonym: Antisal 2b
Anhydrous hydrofluoric acid
Fluohydric acid gas
Fluohydric gas
CAS No: 7664-39-3
Use: Unscheduled precursor to DF, PFIB, and Sarin

Chemical: hydroxy-.alpha.-phenyl-

See: 2,2-Diphenyl-2-hydroxyacetic acid

Chemical: Hydroxyacetonitrile

Synonym: Cyanomethanol
Cyanohydrin formaldehyde
Glycolonitrile
CAS No: 107-16-4
Use: Unscheduled precursor to HN2

Chemical: I-GA

See: O-Ethyl N,N-diisopropyl phosphoramidocyanidate

Chemical: I-GD

See: O-Pinacolyl isopropyl phosphonofluoridate

Chemical: Inferno

See: Amiton

Chemical: Iodomethane

See: Methyl iodide

Chemical: Isobutenyl methyl ketone

See: Mesityl oxide

Chemical: Isonicotinic acid

Synonym: 4-Pyridinecarboxylic acid
g-Pyridinecarboxylic acid
g-Picolinic acid
CAS No: 55-22-1
Use: Unscheduled precursor to 3-Quinuclidinone hydro

Chemical: Isopropanol

Synonym: Isopropyl alcohol
2-Propanol
1-Methyl ethanol
2-Hydroxypropane
2-Propyl alcohol
CAS No: 67-63-0
Use: Unscheduled precursor to Sarin

Chemical: Isopropyl alcohol

See: Isopropanol

Chemical: Isopropyl ethylphosphonofluoridate

See: O-Isopropyl ethylphosphonofluoridate

Chemical: Isopropyl GA

See: O-Ethyl N,N-diisopropyl phosphoramidocyanidate

Chemical: Isopropyl GD

See: O-Pinacolyl isopropyl phosphonofluoridate

Chemical: Isopropyl GF, I-GF

See: O-Cyclohexanyl isopropyl phosphonofluoridate

Chemical: Isopropyl isopropylphosphinate

See: Diisopropyl phosphonate

Chemical: Isopropyl sodium phosphite

See: Sodium diisopropyl phosphonate

Chemical: Isopropylideneacetone

See: Mesityl oxide

Chemical: KB

See: N,N-Diisopropyl-(beta)-aminoethanol

Chemical: KCL III

See: Ricin

Chemical: KCL IV

See: Ricin

Chemical: Kefo

See: Phosphoric acid

Chemical: Kromfax solvent

See: Bis(2-hydroxyethyl)sulfide

Chemical: Lewisite 1

Synonym: 2-Chlorovinyldichloroarsine
2-chloroethanyl-dichloroarsine
M-1
Lyuizit
R-5
Schedule: 1A
CAS No: 541-25-3
Synthesis: 1) arsenic trichloride and acetylene; 2) arsenic trichloride and trichloro(2-chlorvinyl) silicide; 3) arsenic trichloride and acetylene; 4) arsenic trichloride and acetylene
Catalyst: 1) aluminum chloride; 2) cuprous chloride w/ ethanolamine hydrochloride; 3) mercuric chloride/ hydrochloric acid
Use: Toxic chemical

Chemical: Lewisite 2

Synonym: Bis(2-chlorovinyl)chloroarsine
M-2
Chlorobis(2-chlorovinyl)arsine
Schedule: 1A
CAS No: 40334-69-8
Synthesis: Lewisite 2 is a 10% coproduct of Lewisite 1 (1st process)
Use: Toxic chemical

Chemical: Lewisite 3

Synonym: Tris(2-chlorovinyl)arsine
M-3
Schedule: 1A
CAS No: 40334-70-1
Synthesis: Lewisite 3 is a <10% coproduct of Lewisite 1 (1st process)
Use: Toxic chemical

Chemical: Lithium (T-4) aluminate

See: Lithium aluminum hydride

Chemical: Lithium aluminum hydride

Synonym: Aluminum lithium hydride
Sodium tetrahydrodoborate
Lithium (T-4) aluminate
CAS No: 16853-85-3
Use: Unscheduled precursor to BZ

Chemical: LT

See: Bis(2-diisopropylamino ethyl) methylphosphonite

Chemical: Lyuizit

See: Lewisite 1

Chemical: M-1

See: Lewisite 1

Chemical: M-2

See: Lewisite 2

Chemical: M-3

See: Lewisite 3

Chemical: Magnesium, bromophenyl

See: Phenyl magnesium bromide

Chemical: Marsh gas

See: Methane

Chemical: MEA

See: Ethanolamine

Chemical: MEA (alcohol)

See: Ethanolamine

Chemical: Mercurialin

See: Methylamine

Chemical: Mercuric chloride

Synonym: Mercury chloride (HgCl2)
Mercury (II) chloride
Mercury bichloride
Mercury perchloride
Corrosive sublimate
CAS No: 7487-94-7
Use: Reaction catalyst in production of Lewisite 1

Chemical: Mercury (II) chloride

See: Mercuric chloride

Chemical: Mercury bichloride

See: Mercuric chloride

Chemical: Mercury chloride (HgCl2)

See: Mercuric chloride

Chemical: Mercury perchloride

See: Mercuric chloride

Chemical: Mesityl oxide

Synonym: 4-Methyl-3-penten-2-one
3-Penten-2-one,4-methyl
Isopropylideneacetone
Isobutenyl methyl ketone
CAS No: 141-79-7
Use: Unscheduled precursor to Pinacolone

Chemical: Methanamine

See: Methylamine

Chemical: Methanamine, N-methyl-

See: Dimethylamine

Chemical: Methanamine, N-methyl-, hydrochloride

See: Dimethylamine HCl

Chemical: Methane

Synonym: Biogas
Marsh gas
Methyl hydride
R 50
R 50 (refrigerant)
CAS No: 74-82-8
Use: Unscheduled precursor to Sarin, Soman, and VX

Chemical: Methane dichloride

See: Methylene dichloride

Chemical: Methane, chloro

See: Methyl chloride

Chemical: Methane, dichloro

See: Methylene dichloride

Chemical: Methane, iodo

See: Methyl iodide

Chemical: Methane, oxybis(chloro-

See: Bis(chloromethyl)ether

Chemical: Methanol

Synonym: Bialeski's solution
Carbinol
Methyl alcohol
Methyl hydrate
Methyl hydroxide
CAS No: 67-56-1
Use: Reaction catalyst in production of 2-(N,Ndiethylamino) ethanol

Chemical: Methanol, sodium salt

See: Sodium methylate

Chemical: Methyl alcohol

See: Methanol

Chemical: Methyl benzilate

Synonym: Methyl ester
Methyl diphenylglycolate
Diphenylglycolic acid methyl ester
Benzilic acid, methyl ester
Methyl hydroxydiphenlacetate
CAS No: 76-89-1
Use: BZ

Chemical: Methyl chloride

Synonym: Chloromethane
Artic
Methane, chloro
Monochloromethane
R 40
CAS No: 74-87-3
Use: Unscheduled precursor to DIMP and DMMP

Chemical: Methyl diethanolamine

CAS No: 105-59-9
Use: Unscheduled precursor to HN2

Chemical:
Methyl diphenylglycolate

See: Methyl benzilate

Chemical: Methyl ester

See: Methyl benzilate

Chemical: Methyl formate

CAS No: 107-31-3
Use: Unscheduled precursor to Phosgene

Chemical: Methyl hydrate

See: Methanol

Chemical: Methyl hydride

See: Methane

Chemical: Methyl hydroxide

See: Methanol

Chemical:
Methyl hydroxydiphenlacetate

See: Methyl benzilate

Chemical: Methyl iodide

Synonym: Iodomethane
Methane, iodo
CAS No: 74-88-4
Use: Unscheduled reaction catalyst in production of DMMP

Chemical:
Methyl methanephosphonate

See: O-Methyl methylphosphonate

Chemical: Methyl methyl phosphonic acid

See: O-Methyl methylphosphonate

Chemical:
Methyl methylphosphonate

See: O-Methyl methylphosphonate

Chemical: Methyl methylphosphonochloridate

Synonym: Phosphonochloridic acid,
methyl-, methylester
Methyl methylphosphonochloridic acid
Schedule: 2B
CAS No: 1066-52-0
Use: Byproduct of Chlorosarin

Chemical: Methyl methylphosphonochloridic acid

See: Methyl methylphosphonochloridate

Chemical:
Methyl phosphonate, anhydride

See: 1,2-Dimethyldiphosphonic Acid

Chemical:
Methyl phosphinyl dichloride

See: Methylphosphonous dichloride

Chemical:
Methyl phosphinyl difluoride

See: Methylphosphonous difluoride

Chemical: Methylamine

Synonym: Amino methane
Carbinamine
MMA
Methanamine
Mercurialin
CAS No: 74-89-5
Use: Unscheduled precursor to Methylethanolamine

Chemical: Methyldiethanolamine

Synonym: 2,2-(methylimino)diethanol
S glycol
S-diol
Schedule: 3B
CAS No: 105-59-9
Synthesis: Ethylene oxide and methylamine
Use: Scheduled precursor to HN2

Chemical: Methylene chloride

CAS No: 75-05-2
Use: Reaction catalyst in production of "Perren-Kinnear" complex

Chemical: Methylene dichloride

Synonym: Dichloromethane
Methane, dichloro
Methane dichloride
Solmethine
CAS No: 75-09-2
Use: Unscheduled precursor to Sarin, HD, and Soman

Chemical:
Methylphosphonic anhydride

See: 1,2-Dimethyldiphosphonic acid

Chemical:
Methylphosphonic dichloride

See: Methylphosphonyl dichloride

Chemical:
Methylphosphonic difluoride

See: Methylphosphonyl difluoride

Chemical:
Methylphosphonodichloridate

See: Methylphosphonyl dichloride

Chemical:
Methylphosphonothioic acid, O,O-diethyl ester

See: O,O Diethyl methylphosphonothionate

Chemical:
Methylphosphonothioic acid, O-ethyl ester

See: O-Ethyl methylphosphonothiolic acid

Chemical:
Methylphosphonothioic dichloride

Synonym: SWS
Dichloromethylphosphine
Phosphonothiotic dichloride, methyl
Schedule: 2B
CAS No: 676-98-2
Use: Scheduled precursor to YLS and VX

Chemical:
Methylphosphonous dichloride

Synonym: Methyl phosphinyl dichloride
Schedule: 2B
CAS No: 676-83-5
Synthesis: Phosphorous trichloride and methane
Use: Scheduled precursor to VX

Chemical:
Methylphosphonous difluoride

Synonym: Methyl phosphinyl difluoride
Schedule: 2B
CAS No: 753-59-3
Synthesis: Phosphorous trifluoride and methane
Use: Scheduled precursor to VX

Chemical:
Methylphosphonyl dichloride

Synonym: DC
Dichlor
Methylphosphonic dichloride
Methylphosphonodichloridate
Schedule: 2B
CAS No: 676-97-1
Synthesis: 1) dimethyldiphosphonic acid, phosphorus trichloride; 2) dimethyldiphosphonic acid, methylphosphonous dichloride; 3) DMMP, thionyl chloride; 4) "Perren-Kinnear" complex and methylene chloride
Catalyst: Nitrogen, calcium chloride
Use: Scheduled precursor to Sarin, Soman, DF, and Chlorosoman

Chemical:
Methylphosphonyl difluoride

Synonym: DF
Methylphosphonic difluoride
Difluor
Schedule: 1B
CAS No: 676-99-3
Synthesis: Methylphosphonic dichloride and hydrogen fluoride
Use: Scheduled precursor to Sarin and Soman

Chemical:
Methylphosphorus tetrachloride

Synonym: MPTC
Tetrachloromethylphosphorane
Phosphorane, tetrachloromethyl-
Methyltetrachlorophosphorous (V)
Schedule: 2B
CAS No: 2725-68-0
Use: Scheduled precursor to DC, DIMP, and DF

Chemical:
Methyltetrachlorophosphorous (V)

See: Methylphosphorus tetrachloride

Chemical: Metramac

See: Amiton

Chemical: MMA

See: Methylamine

Chemical: MMPA

See: O-Methyl methylphosphonate

Chemical: Molecular chlorine

See: Chlorine

Chemical: Monochloroethylene

See: Vinyl chloride

Chemical: Monochloromethane

See: Methyl chloride

Chemical: Monoethylamine

See: Ethylamine

Chemical: Monosulfur dichloride

See: Sulfur dichloride

Chemical: Morpholine, N-2-hydroxyethyl-4-sulfo ,hydrochloride

See: N-Hydroxyethylthiomorpholine hydrochloride

Chemical: MPTC

See: Methylphosphorus tetrachloride

Chemical: Mustard gas

See: Bis(2-chloroethyl)sulfide

Chemical: Mustard oil (M.O.)

See: Bis(2-chloroethyl)sulfide

Chemical:
N,N Dipropylphosphoramidic dichloride

Synonym: N,N-Di-n-propyl phosphoramidic dichloride
Di-n-propylphosphoramidic dichloride
Schedule: 2B
CAS No: 40881-98-9
Use: Scheduled precursor to G11

Chemical: N,N-Di-n-propyl phosphoramidic dichloride

See: N,N Dipropylphosphoramidic dichloride

Chemical: N,N-Dibutyl-

See: Tributylamine

Chemical: N,N-Dibutyl-1-butanamine

See: Tributylamine

Chemical: N,N-Diethylaminoethane-2-thio

See: N,N-Diethylaminoethanethiol

Chemical: N,N-Diethylaminoethanethiol

Synonym: N,N-Diethylaminoethane-2-thiol
Ethanethiol, 2-(diethylamino)
Diethylcysteamine
Diethyl (2-mercaptoethyl) amine
Schedule: 2B
CAS No: 100-38-9

Chemical: N,N-Diisopropyl phosphoramidic dichloride

Schedule: 2B
CAS No: 23306-80-1
Use: Scheduled precursor to G10

Chemical: N,N-Diisopropyl-(beta)-aminoethanol

Synonym: KB
Ethanol, 2-(bis(1-methylethyl)amino)
2-(Bis(1-methylethyl) amino) ethanol
(N,N-Diisopropylamino) ethanol
Schedule: 2B
CAS No: 96-80-0
Use: Scheduled precursor to QL, VX, VS, V4, and V5

Chemical: N,N-Diisopropyl-(beta)-aminoethyl chloride

Synonym: 2-(N,N,-Diisopropylamino) ethyl chloride
2-Propanamine, N-(2-chloroethyl)-N-(1-methylethyl)-
N-(2-Chloroethyl)-N-(1-methylethyl)-2-propanamine
Schedule: 2B
CAS No: 96-79-7
Use: Scheduled precursor to VX and VS

Chemical: N,N-Diisopropyl-.beta.-aminoethanethiol

See: N,Ndiisopropylaminoethanethiol

Chemical: N,N-Diisopropyl-2-aminoethyl chloride hydrochloride

See: 2-(N,N-Diisopropylamino) ethyl chloride hydrochloride

Chemical: N,N-Diisopropylamine

See: Diisopropylamine

Chemical: N,N-Diisopropylaminoethanethiol

Synonym: N,N-Diisopropyl-.beta.-aminoethanethiol
Diisopropylaminoethanethiol
Ethanethiol, 2-(diisopropylamino)-
Schedule: 2B
CAS No: 5842-07-9
Use: Scheduled precursor to VX and VS

Chemical: N,N-Dimethylamine

See: Dimethylamine

Chemical: N,N-Dimethylphosphoramidic dichloride

Synonym: N,N-dimethylphosphoramido dichloridate
Product 39
Schedule: 2B
CAS No: 677-43-0
Synthesis: N,N-dimethylphophoramido dichloridate
Catalyst: Solvent such as chlorobenzene
Use: Scheduled precursor to Tabun and DC

Chemical: N,N-Dimethylphosphoramidic dicyanide

Synonym: Dimethylphosphoramidic dicyanide
Phosphoramidic dicyanide, dimethyl
Schedule: 2B
Use: Scheduled precursor to Tabun

Chemical: N,N-Dimethylphosphoramido dichloridate

See: N,N-Dimethylphosphoramidic dichloride

Chemical: N-(2-Chloroethyl)-N-(1-methylethyl)-2-propanamine

See: N,N-diisopropyl-(beta)-aminoethyl chloride

Chemical: N-(2-chloroethyl)-Npropyl-1-propanamine

See: 2-(N,N-Dipropylamino) ethyl chloride

Chemical: N-(2-Chloroethyl)-N-propyl-1-propanamine hydrochloride

See: (N,N-Dipropylamino) ethyl chloride hydrochloride

Chemical: N-Ethyl-2-2-iminodiethanol

See: Ethyldiethanolamine

Chemical: n-Ethylamine

See: Ethylamine

Chemical: N-Ethylethanamine

See: Diethylamine

Chemical: N-Hydroxyethylthiomorpholine hydrochloride

Synonym: Morpholine, N-2-hydroxyethyl-4-sulfo-,hydrochloride
Use: Unscheduled precursor to HD

Chemical: N-Methylmethanamine

See: Dimethylamine

Chemical: N-Methylmethanamine hydrochloride

See: Dimethylamine HCl

Chemical: Narcylen

See: Acetylene

Chemical: Natrium

See: Sodium

Chemical: Natrium cyanide

See: Sodium cyanide

Chemical: NCI-CO4591

See: Carbon disulfide

Chemical: Nitrochloroform

See: Chloropicrin

Chemical: Nitrochloromethane

See: Chloropicrin

Chemical: Nitrogen Lost

See: HN3

Chemical: Nitrogen mustard

See: HN3

Chemical: Nitrogen yperite

See: HN3

Chemical: Nitrosil

See: Ammonia

Chemical: O,O Diethyl methylphosphonothionate

Synonym: TRS
Diethyl methylphosphonothionate
Methylphosphonothioic acid, O,Odiethyl
ester
Schedule: 2B
CAS No: 6996-81-2
Use: Scheduled precursor to YLS

Chemical: O,O Diethylphosphorochloridate

Synonym: Phosphorochloridic acid, diethyl ester
Diethyl phosphorochloridate
CAS No: 814-49-3
Use: Unscheduled precursor to Amiton

Chemical: O,O-Diethyl ester

See: Amiton

Chemical: O,O-Diethyl ester of methlphosphonus acid

See: Diethyl methylphosphonite

Chemical: O,O-Diethyl N,Ndimethylphosphoramidite

Synonym: OEDMDAI
Phosphoramidous acid, dimethyl-, diethyl ester
Diethyl dimethylphosphoramidite
Diethyl dimethylphosphoramidous acid
CAS No: 2632-87-3
Use: Unscheduled precursor to Tabun

Chemical: O,O-Diethyl phosphorothionochloridate

Synonym: Chlorophosphonothioic acid, O,O-diethyl ester
Diethyl phosphorothiochloridate
CAS No: 2524-04-1
Use: Unscheduled precursor to Amiton

Chemical: O,O-Diisopropyl hydrogenphosphonate

Synonym: Diisopropyl hydrogen phosphonate
Phosphorous acid, bis(1-methylethyl) ester
CAS No: 691-96-3
Use: Unscheduled precursor to DIMP and Sarin

Chemical: O,O-Diisopropyl methylphosphonite

Synonym: Phosphonous acid, methyl-, di-(1-methylethyl) ester
Schedule: 2B
Use: Scheduled precursor to IMPF, IMPC, and DIMP

Chemical: O,O-Dimethyl methyl phosphonite

Synonym: Phosphonous acid, methyl-, dimethyl ester, Dimethyl methyl phosphonous acid
Schedule: 2B
Use: Scheduled precursor to VX

Chemical: O,O-Dimethylphosphonate

See: Dimethyl phosphite

Chemical: O,O-Dipinacolyl methylphosphonate

Synonym: DPMP
Phosphonic acid, methyl-, bis(1,2,2-trimethylpropyl) ester
Bis(1,2,2-trimethylpropyl) methyl Phosphonate
Schedule: 2B
CAS No: 7040-58-6
Use: Scheduled precursor to and byproduct of Chlorosoman

Chemical: O-Cyclohexanyl isopropyl phosphonofluoridate

Synonym: Isopropyl GF, I-GF
Phosphonofluoridic acid (1-methylethyl), cyclohexyl ester
Schedule: 1A
Use: Toxic chemical

Chemical: O-Ethyl methyl phosphinic acid

Synonym: Ethyl methylphosphinate
YL
Ethoxymethylphosphine oxide
Schedule: 2B
CAS No: 16391-07-4
Use: Scheduled precursor to VX; degradation product of QL (hydrolysis)

Chemical: O-Ethyl methylphosphonochloridite

Synonym: Ethyl methyl phosphonochloridite,
Phosphonochloridous acid, methyl-,
ethyl
Ethyl methylphosphonous chloride ester
Schedule: 2B
Use: Scheduled precursor to VX

Chemical: O-Ethyl methylphosphonothioic acid

See: O-Ethyl methylphosphonothiolic acid

Chemical: O-Ethyl methylphosphonothiolic acid

Synonym: YLS
Ethyl ThioMPA
O-Ethyl methylphosphonothioic acid
Methylphosphonothioic acid, O-ethyl-ester
Schedule: 2B
CAS No: 18005-40-8
Use: Scheduled precursor to VX; degradation product of VX (hydrolysis)

Chemical: O-Ethyl N,N-diisopropyl phosphoramidocyanidate

Synonym: Isopropyl GA
I-GA
Phosphoramidocyanidic acid, di(1-methylethyl)-, ethyl ester
Schedule: 1A
Use: Toxic chemical

Chemical: O-Ethyl N,N-dimethyl phosphoramidochloridate

Synonym: Ethyl N,N-dimethylphosphoramidochloridate
EDMPNC
Schedule: 2B
CAS No: 2510-93-2
Use: Scheduled precursor to and byproduct of Tabun

Chemical: O-Ethyl O-2-Diisopropulaminoethyl methylphosphonothionate

Synonym: CV
O-Ethyl O-2-Diisopropylaminoethyl methylphosphonothiolate
Phosphonothioic acid, methyl-, O-(2-diisopropyl aminoethyl) O-ethyl ester
Schedule: 2B
CAS No: 71840-25-0
Use: Scheduled precursor to VX

Chemical: O-Ethyl O-2-diisopropylaminoethyl methylphosphonite

See: O-Ethyl,2-diisopropyl aminoethyl methylphosphonate

Chemical: O-Ethyl O-2-Diisopropylaminoethyl methylphosphonothiolate

See: O-Ethyl O-2-Diisopropulaminoethyl methylphosphonothionate

Chemical: O-Ethyl S-2-diisopropylaminoethyl n-propyl-phosphonothiolate

Synonym: PP-VX
Schedule: 1A
Use: Toxic chemical

Chemical: O-Ethyl, N,N-di-n-propyl phosphora midocyanidate

Synonym: Propyl GA, P-GA,
Phosphoramidocyanidic acid, dipropyl-, ethyl ester, and Ethyl dipropylphosphoramidocyanidate
Schedule: 1A
Use: Toxic chemical

Chemical: O-Ethyl,2-diisopropyl aminoethyl methylphosphonate

Synonym: QL
Phosphonous acid, methyl-2-(Bis(1-methylethyl) amino) ethyl ethyl ester
O-Ethyl O-2-diisopropylaminoethyl Methylphosphonite
Schedule: 1B
CAS No: 57856-11-8
Synthesis: Diethyl methylphosphonite and KB, 2-(N,N-diethylamino)ethanol
Use: Scheduled binary precursor to VX

Chemical: O-Ethyl-N,N-dimethylphosphoramidocyanidate

See: Tabun

Chemical: O-Ethyl-O-2-iisopropylaminoethyl methylphosphonite

See: O-Ethyl,2-diisopropyl aminoethyl methylphosphonate

Chemical: O-Ethyl-S-2-diisopropylaminoethyl isopropylphosphonothiolate

Synonym: P1-VX,
Schedule: 1A
Use: Toxic chemical

Chemical: O-Ethyl-S-2-diisopropylaminoethyl methyl phosphonothiolate

See: VX

Chemical: O-Isopropyl ethylphosphonofluoridate

Synonym: GE
Phosphonofluoridic acid, ethyl-,1-methylethyl ester
Ethylsarin
Ethyl GB
Isopropyl ethylphosphonofluoridate
Schedule: 1A
CAS No: 1189-87-3
Use: Toxic chemical

Chemical: O-Isopropyl methylphosphonochloridate

See: Chlorosarin

Chemical: O-Isopropyl methylphosphonofluoridate

Synonym: GB
Sarin
EA 1208
Schedule: 1A
CAS No: 107-44-8
Use: Toxic chemical

Chemical: O-Methyl methyl phosphonate

See: O-Methyl methylphosphonate

Chemical: O-Methyl methylphosphonate

Synonym: MMPA
Methyl methanephosphonate
Methyl methylphosphonate
Methyl methyl phosphonic acid
O-Methyl methyl phosphonate
Schedule: 2B
CAS No: 1066-53-1
Use: Scheduled precursor to DC, DIMD, and DF

Chemical: O-Mustard

Synonym: Bis(2-chloroethylthioethyl)ether
T
English Lost
T-724
Oxygen yperite
Schedule: 1A
CAS No: 63918-89-8
Synthesis: 1) bis(2-hydroxyethylthioethyl)ether and thionyl chloride; 2) bis(2-mercaptoethyl)ether and vinyl chloride; 3) thiodiglycol and bis(2-hydroxyethyl)sulfide with HCl; 4) thiodiglycol and NaOH and bis(2-chloroethyl)sulfide
Use: Toxic chemical

Chemical: O-O-diisopropyl methylphosphonate

See: DIMP

Chemical: O-Pinacolyl ethylphosphonofluoridate

Synonym: Ethylsoman
E-GD
Phosphono fluoridic acid, ethyl-,1,2,2-trimethyl propyl ester
Ethyl GD
O-Pinacolyl ethylphosphonofluoridate
Schedule: 1A
CAS No: 97931-20-9
Use: Toxic chemical

Chemical: O-Pinacolyl isopropyl phosphonofluoridate

Synonym: Isopropyl GD
I-GD
O-Pinacolyl isopropylphosphonofluoridate
Phosphonofluoridic acid, (1-methylethyl)-1,2,2-trimethylpropyl ester
Schedule: 1A
Use: Toxic chemical

Chemical: O-Pinacolyl isopropylphosphonofluoridate

See: O-Pinacolyl isopropyl phosphonofluoridate

Chemical: O-Pinacolyl methylphosphonochloridate

See: Chlorosoman

Chemical: O-Pinacolyl methylphosphonofluoridate

See: Soman

Chemical: Octafluorocyclobutane

See: Perfluoro cyclobutane

Chemical: Octafluoroisbutylene

See: PFIB

Chemical: OEDMDAI

See: O,O-Diethyl N,N-dimethylphosphoramidite

Chemical: Olefiant gas

See: Ethylene

Chemical: Orthophosphoric acid

See: Phosphoric acid

Chemical: oxiran

See: Ethylene oxide

Chemical: Oxybis(chloromethane)

See: Bis(chloromethyl)ether

Chemical: Oxygen yperite

See: O-Mustard

Chemical: P1-VX

See: O-Ethyl-S-2-diisopropylaminoethyl isopropylphosphonothiolate

Chemical: Pentachlorophosphorane

See: Phosphorus pentachloride

Chemical: Pentachlorophosphorous

See: Phosphorus pentachloride

Chemical: Pentadiene,3-fluoro-1,4-, homopolymer

See: Polyfluoroethylenepropylene

Chemical: Pentane, 1,5-bis[(2-chloroethyl)thio]

See: 1,5-Bis(2-chloroethylthio)-npentane

Chemical: Pentane,1,5-dichloro

See: 1,5-Dichloro-n-pentane

Chemical: Perfluorisobutylene

See: PFIB

Chemical: Perfluoro cyclobutane

Synonym: Octafluorocyclobutane
Propellant C318
R 318
r-C 318
CAS No: 115-25-3
Use: Unscheduled precursor to PFIB

Chemical: Perfluoroisbutene

See: PFIB

Chemical: Perfluoropropylene

Synonym: 1-Propene,1,1,2,3,3,3-hexafluoro-
Hexafluoropropylene
CAS No: 116-15-4
Use: Unscheduled precursosr to PFIB

Chemical: "Perren-Kinnear" complex

Schedule: 2B
CAS No: 4083-88-9
Synthesis: Phosphorous trichloride, sodium fluoride and aluminum chloride
Catalyst: Methylene chloride
Use: Scheduled precursor to Methylphosphonic dichlori

Chemical: PFIB

Synonym: 1,1,3,3,3-Pentafluro-2-(trifluoromethyl)-1-propene
Perfluorisobutylene
Perfluoroisbutene
Octafluoroisbutylene
Schedule: 2A
CAS No: 382-21-8
Synthesis: Hydrogen fluoride and polytetrafluoroethylene (PTFE)
Use: Toxic chemical

Chemical: Phenyl magnesium bromide

Synonym: magnesium, bromophenyl
Bromophenylmagnesium
CAS No: 100-58-3
Use: Unscheduled precursor to BZ

Chemical: Phosgene

Synonym: Carbonyl dichloride
Schedule: 3A
CAS No: 75-44-5
Synthesis: 1) carbon monoxide and chlorine; 2) diphosgene or methyl formate
Catalyst: 1) activated charcoal; 2) Michler's ketone
Use: Scheduled precursor to Chlorosarin and Chlorosoman

Chemical: Phosphine, trichloro-

See: Phosphorus trichloride

Chemical: Phosphonic acid, bis(1-methyl ethyl) ester

See: Diisopropyl phosphonate

Chemical: Phosphonic acid, diethyl ester, sodium salt

See: Sodium O,O-diethyl phosphite

Chemical: Phosphonic acid, diisopropyl ester

See: Diisopropyl phosphonate

Chemical: Phosphonic acid, dimethyl-, sodium salt

See: Sodium dimethyl phosphonate

Chemical: Phosphonic acid, ethyl-, diethyl ester

See: Diethyl ethylphosphonate

Chemical: Phosphonic acid, ethyl-, dimethyl ester

See: Dimethyl ethylphosphonate

Chemical: Phosphonic acid, methyl-, anhydride

See: 1,2-Dimethyldiphosphonic acid

Chemical: Phosphonic acid, methyl-, bis(1,2,2-trimethylpropyl) ester

See: O,O-Dipinacolyl methylphosphonate

Chemical: Phosphono fluoridic acid, ethyl-, 1,2,2-trimethyl propyl ester

See: O-Pinacolyl ethylphosphonofluoridate

Chemical: Phosphonochloridic acid, methyl-, methylester

See: Methyl methylphosphonochloridate

Chemical: Phosphonofluoridic acid (1-methylethyl), cyclohexyl ester

See: O-Cyclohexanyl isopropyl phosphonofluoridate

Chemical: Phosphonofluoridic acid, (1-methylethyl)-

See: O-Pinacolyl isopropyl phosphonofluoridate

Chemical: Phosphonofluoridic acid, ethyl-,1-methylethyl ester

See: O-Isopropyl ethylphosphonofluoridate

Chemical: Phosphonothioic acid, methyl

See: S-2-Diisopropylaminoethyl methylphosphonothioic acid

Chemical: Phosphonothioic acid, methyl-, O-(2-diisopropyl aminoethyl) O-ethyl ester

See: O-Ethyl O-2-Diisopropulaminoethyl methylphosphonothionate

Chemical: Phosphonothiotic dichloride, methyl

See: Methylphosphonothioic dichloride

Chemical: Phosphonous acid, methyl-

See: Bis(2-diisopropylamino ethyl) methylphosphonite

Chemical: Phosphonous acid, methyl-,

See: O-Ethyl,2-diisopropyl aminoethyl methylphosphonate

Chemical: Phosphonous acid, methyl-, di-(1-methylethyl) ester

See: O,O-Diisopropyl methylphosphonite

Chemical: Phosphonous dichloride, ethyl-

See: Ethylphosphonous dichloride

Chemical: Phosphonous, difluoride, ethyl-

See: Ethylphosphonous difluoride

Chemical: Phosphoramidic dicyanide, dimethyl

See: N,N-Dimethylphosphoramidic dicyanide

Chemical: Phosphoramidocyanidic acid, di(1-methylethyl)-, ethyl ester

See: O-Ethyl N,N-diisopropyl phosphoramidocyanidate

Chemical: Phosphoramidous acid, dimethyl-, diethyl ester

See: O,O-Diethyl N,Ndimethylphosphoramidite

Chemical: Phosphorane, tetrachloromethyl-

See: Methylphosphorus tetrachloride

Chemical: Phosphoric acid

Synonym: 3M Etching liquid
Decon 4512
EVITs
Orthophosphoric acid
Sonac
WC-Reiniger
Kefo
CAS No: 7664-38-2
Use: Unscheduled precursor to GB; degradation product

Chemical: Phosphoric anhydride

See: Phosphorus pentoxide

Chemical: Phosphoric chloride

See: Phosphorus pentachloride

Chemical: Phosphorochloridic acid, diethyl ester

See: O,O Diethylphosphorochloridate

Chemical: Phosphorochloridous acid, diethyl ester

See: Diethylphosphorachloridite

Chemical: Phosphorous acid, bis(1-methylethyl) ester

See: O,O-Diisopropyl hydrogenphosphonate

Chemical: Phosphorous acid, diisopropyl ester, sodium salt

See: Sodium diisopropyl phosphonate

Chemical: Phosphorous chloride

See: Phosphorus trichloride

Chemical: Phosphorous chloride (Cl6P2)

See: Phosphorus trichloride

Chemical: Phosphorous chloride (PCl5)

See: Phosphorus pentachloride

Chemical: Phosphorous perchloride

See: Phosphorus pentachloride

Chemical: Phosphorus acid

See: Triethyl phosphite

Chemical: Phosphorus oxide (P205)

See: Phosphorus pentoxide

Chemical:
Phosphorus oxychloride

Synonym: Phosphorus oxytrichloride
Phosphoryl chloride
Schedule: 3B
CAS No: 10025-87-3
Synthesis: 1) phosphorus trichloride and oxygen; 2) phosphorus pentachloride and phosphorus pentoxide; 3) phosphorus ore, sulfuric acid, ammonium sulfate, and chlorine
Use: Scheduled precursor to N,Ndimethylphosphoramidic dichloride

Chemical:
Phosphorus oxytrichloride

See: Phosphorus oxychloride

Chemical:
Phosphorus pentachloride

Synonym: Pentachlorophosphorane
Pentachlorophosphorous
Phosphoric chloride
Phosphorous chloride (PCl5)
Phosphorous perchloride
Schedule: 3B
CAS No: 10026-13-8
Synthesis: Phosphorus trichloride, chloroform, and chlorine
Use: Scheduled precursor to Mustard gas, O-Mustard, DF, and DC

Chemical:
Phosphorus pentasulfide

CAS No: 1314-80-3
Use: VG and VX

Chemical: Phosphorus pentoxide

Synonym: Phosphoric anhydride
Phosphorus oxide (P205)
CAS No: 1314-56-3
Use: Unscheduled precursor to Phosphorus oxychloride

Chemical: Phosphorus trichloride

Synonym: Phosphine, trichloro-
Phosphorous chloride (Cl6P2)
Phosphorous trichloride
Schedule: 3B
CAS No: 7719-12-2
Synthesis: Elemental chlorine and elemental phosphorus in the presence of previously added phosphorus trichloride
Use: Scheduled precursor to DC, Methylphosphonous dichloride, Phosphorus pentachloride, Trimethyl phosphite, Triethyl phosphite, and Diethyl phosphite

Chemical: Phosphoryl chloride

See: Phosphorus oxychloride

Chemical: Picric acid

Synonym: 1-Hydroxy-2,4,6-Trinitrobenzene
1,3,5-Trinitrophenol Picric acid
Trinitrophenol
2,4,6-Trinitrophenol
CAS No: 88-89-1
Use: Unscheduled precursor to Chloropicrin

Chemical: Pinacol

See: 2,3-Dimethyl-2,3-butanediol

Chemical: Pinacoline

See: Pinacolone

Chemical: Pinacolone

Synonym: 3,3-Dimethyl-2-butanone
2-Butanone,3,3-dimethyl
Pinacoline
tert-Butyl methyl keytone
CAS No: 75-97-8
Use: Unscheduled precursor to Pinacolyl alcohol

Chemical: Pinacolyl alcohol

Synonym: 3,3-Dimethylbutane-2-ol
2,2-Dimethylbutan-3-ol
Schedule: 2B
CAS No: 464-07-3
Synthesis: Pinacolone and hydrogen
Use: Scheduled precursor to Soman

Chemical: Pinacone

See: 2,3-Dimethyl-2,3-butanediol

Chemical:
Polyfluoroethylenepropylene

Synonym: Pentadiene,3-fluoro-1,4-, homopolymer
Use: Unscheduled precursor to PFIB

Chemical: Polytetrafluoroethylene

Synonym: PTFE
Ethene, tetrafluoro-,homopolymer
Tetrafluoroethene homopolymer
Teflon
CAS No: 9002-84-0
Use: Unscheduled precursor to PFIB

Chemical: Potassium bifluoride

CAS No: 7789-29-9
Use: Precursor to Sarin, Soman, and GF

Chemical: Potassium cyanide

CAS No: 151-50-8
Use: Tabun and Hydrogen cyanide

Chemical: Potassium fluoride

Synonym: Potassium fluoride (KF)
Potassium monofluoride
Clocat F
CAS No: 7789-23-3
Use: Unscheduled precursor to Sarin

Chemical:
Potassium fluoride (KF)

See: Potassium fluoride

Chemical:
Potassium monofluoride

See: Potassium fluoride

Chemical: PP-VX

See: O-Ethyl S-2-diisopropylaminoethyl n-propyl-phosphonothiolate

Chemical: Product 39

See: N,N-dimethylphosphoramidic dichloride

Chemical: Propane, 1,3-dichloro

See: 1,3-Dichloropropane

Chemical:
Propane, 2-chloro-2-methyl

See: t-Butyl chloride

Chemical: Propellant C318

See: Perfluoro cyclobutane

Chemical: Proteins, ricins

See: Ricin

Chemical: PTFE

See: Polytetrafluoroethylene

Chemical: Pyridine, 4-methyl

See: 4-Methylpyridine

Chemical: Pyromix

See: 1,2-Dimethyldiphosphonic acid

Chemical: Q

See: Sesquimustard

Chemical: QL

See: O-Ethyl,2-diisopropyl aminoethyl methylphosphonate

Chemical: Quinuclidine-3-ol

Synonym: 3-Quinuclidinol
3-Hydroxy-azabicyclo [2.2.2]octane
3-Q azabicyclo [2.2.2]-3-octanol
Schedule: 2B
CAS No: 1619-34-7
Synthesis: 3-Quinuclidinone hydrochloride and hydrogen
Catalyst: Pt oxide
Use: Scheduled precursor to BZ and Arsenic trichloride

Chemical:
Quinuclidinone hydrochloride

See: 3-Quinuclidone hydrochloride

Chemical: Quinuclidone

See: 3-Quinuclidinone

Chemical: R 318

See: Perfluoro cyclobutane

Chemical: R 40

See: Methyl chloride

Chemical: R 50

See: Methane

Chemical: R 50 (refrigerant)

See: Methane

Chemical: R 717

See: Ammonia

Chemical: R-5

See: Lewisite 1

Chemical: R-5,150

See: Amiton

Chemical: r-C 318

See: Perfluoro cyclobutane

Chemical: RCA

See: Ricin

Chemical: Refrigerant R717

See: Ammonia

Chemical: Rhodia-6200

See: Amiton

Chemical: Ricin

Synonym: RCA
Ricin Communis Agglutin
Proteins, ricins
Ricine
KCL III
KCL IV
Schedule: 1B
CAS No: 9009-86-3
Synthesis: Naturally occurring in castor bean; obtained by separation, extraction, and isolation
Catalyst: Heptane; water; sulfuric or hydrochloric acid; sodium hydroxide;
sodium sulfate; and sodium chloride
Use: Toxic chemical

Chemical:
Ricin Communis Agglutin

See: Ricin

Chemical: Ricine

See: Ricin

Chemical: S

See: HN2

Chemical: S glycol

See: Methyldiethanolamine

Chemical: S-(2-diethylamino) ethyl,phosphoro-thioic acid

See: Amiton

Chemical: S-2-(Diisopropylamino) ethyl methylphosphonothioic acid

See: S-2-Diisopropylaminoethyl methylphosphonothioic acid

Chemical: S-2-Diisopropylaminoethyl methylphosphonothioic acid

Synonym: S-2-(Diisopropylamino) ethyl methylphosphonothioic acid
EA 2192 Phosphonothioic acid, methyl
Schedule: 2B
CAS No: 73207-98-4
Use: Scheduled precursor to and degradation product of VX (hydrolysis)

Chemical: S-diol

See: Methyldiethanolamine

Chemical: Sarin

See: O-Isopropyl methylphosphonofluoridate

Chemical: Saxitoxin

Synonym: TZ
STX
[3aS-(3.alpha.,4.alpha.10aR)]2,6, Diamino-4-[[(aminocarbonyl)oxy]
Shellfish toxin
Saxitoxin hydrate
Schedule: 1A
CAS No: 35523-89-8
Synthesis: Separated from naturally sources in shell fish and refined
Catalyst: Water; sulfuric or hydrochloric acid; ethanol or methanol
Use: Toxic chemical

Chemical: Saxitoxin hydrate

See: Saxitoxin

Chemical: Sesquimustard

Synonym: 1,2-bis(2-chloroethylthio)ethane
Q
Doppel-O
Schedule: 1A
CAS No: 3563-36-8
Synthesis: 1) 2-hydroxyethanethiol and vinyl chloride; 2) 1,2-bis(2-hydroxyethylthio)ethane and HCl gas; 3) 1,2-bis(2-hydroxyethylthio) ethane and thionyl chloride; 4) 1,2-ethanedithiol and vinyl chloride; 5) 2-hydroxyethanethiol and thiodiglycol with hydrochloric acid
Use: Toxic chemical

Chemical: Shellfish toxin

See: Saxitoxin

Chemical: Silane, tetrachlo-

See: Silicon tetrachloride

Chemical: Silane, trichloro (1-chloroethenyl)-

See: 2-Chlorovinyl-trichlorosilane

Chemical: Silane, trichloro (1-chlorovinyl)-

See: 2-Chlorovinyl-trichlorosilane

Chemical: Silane, trichloro (2-chloroethenyl)-

See: Trichloro (2-chloroethenyl) silicide

Chemical: Silicic acid, tetrakis (1-methylethyl) ester

See: Tetraisopropyl orthosilicate

Chemical: Silicon (IV) chloride

See: Silicon tetrachloride

Chemical: Silicon chloride

See: Silicon tetrachloride

Chemical: Silicon tetrachloride

Synonym: Silane, tetrachlo-
Silicon (IV) chloride
Silicon chloride
Tetrachlorosilane
CAS No: 10026-04-7
Use: Byproduct of L

Chemical: Soda ash

See: Sodium carbonate

Chemical: Sodium

Synonym: Natrium
CAS No: 7440-23-5
Use: Unscheduled precursor to Sarin

Chemical: Sodium bifluoride

Synonym: Sodium acid fluoride
Sodium hydrogen fluoride
CAS No: 1333-83-1
Use: Sarin, Soman, and GF

Chemical: Sodium acid fluoride

See: Sodium bifluoride

Chemical: Sodium borohydride

Synonym: Sodium tetrahydridoborate
Borate, tetrahydro-, sodium
Sodium tetrahydroborate
CAS No: 16940-66-2
Use: Unscheduled precursor to BZ

Chemical: Sodium carbonate

Synonym: Carbonic acid, disodium salt
Soda ash
Solvy soda
CAS No: 497-19-8
Use: Unscheduled precursor to HN3

Chemical: Sodium cyanide

Synonym: Cymag
Natrium cyanide
Sodium cyanide (Na(CN))
Cynogran
Cyanide of Sodium
Hydrocyanic acid, sodium salt
CAS No: 143-33-9
Use: Unscheduled precursor to Tabun

Chemical: Sodium cyanide (Na(CN))

See: Sodium cyanide

Chemical: Sodium diethyl phosphite

See: Sodium O,O-diethyl phosphite

Chemical: Sodium diethyoxyphosphine

See: Sodium O,O-diethyl phosphite

Chemical: Sodium diisopropyl phosphite

See: Sodium diisopropyl phosphonate

Chemical: Sodium diisopropyl phosphonate

Synonym: Isopropyl sodium phosphite
Phosphorous acid, diisopropyl ester, sodium salt
Sodium diisopropyl phosphite
CAS No: 27344-79-2
Use: Unscheduled precursor to Sarin

Chemical: Sodium dimethyl phosphonate

Synonym: Sodium Dimethylphosphite
Phosphonic acid, dimethyl-, sodium salt
Sodium dimethyl phosphonic acid
Use: Unscheduled precursor to Sarin
and Soman

Chemical: Sodium dimethyl phosphonic acid

See: Sodium dimethyl phosphonate

Chemical: Sodium dimethylphosphite

See: Sodium dimethyl phosphonate

Chemical: Sodium fluoride

Synonym: Chemifluor
FDA 0101
Floridine
Fluorigard
Fluorol
Flursol
CAS No: 7681-49-4
Use: Unscheduled precursor to "Perren-Kinnear" complex

Chemical: Sodium hydrogen fluoride

See: Sodium bifluoride

Chemical: Sodium hydroxide

Synonym: Aetznatron
Ascarite
Caustic soda
CAS No: 1310-73-1
Use: Unscheduled precursor to VX and HN2

Chemical: Sodium methoxide

See: Sodium methylate

Chemical: Sodium methylate

Synonym: Sodium methoxide
Methanol, sodium salt
CAS No: 124-41-4
Use: Reaction catalyst in production of BZ

Chemical: Sodium monosulfide

See: Sodium sulfide

Chemical: Sodium O,O-diethyl phosphite

Synonym: Phosphonic acid, diethyl ester, sodium salt
Sodium diethyl phosphite
Diethyl sodium phosphite
Diethyl sodium phosphonate
Sodium diethyoxyphosphine
CAS No: 118080-94-7
Use: Unscheduled precursor to Amiton

Chemical: Sodium sulfide

Synonym: Disodium monosulfide
Disodium sulfide
Sodium sulfide (Na2S)
Sodium sulfuret
Sodium monosulfide
CAS No: 1313-82-2
Use: Unscheduled precursor to Thiodiglycol

Chemical: Sodium sulfide (Na2S)

See: Sodium sulfide

Chemical: Sodium sulfuret

See: Sodium sulfide

Chemical: Sodium tetrahydridoborate

See: Sodium borohydride

Chemical: Sodium tetrahydroborate

See: Sodium borohydride

Chemical: Sodium tetrahydrodoborate

See: Lithium aluminum hydride

Chemical: Solmethine

See: Methylene dichloride

Chemical: Solvy soda

See: Sodium carbonate

Chemical: Soman

Synonym: O-Pinacolyl methylphosphonofluoridate
GD
Schedule: 1A
CAS No: 96-64-0
Synthesis: DC, hydrogen fluoride, and pinacolyl alcohol
Catalyst: Tributylamine as a stabilizer
Use: Toxic chemical

Chemical: Sonac

See: Phosphoric acid

Chemical: Spirit of Hartshorn

See: Ammonia

Chemical: STX

See: Saxitoxin

Chemical: Sulfinyl chloride

See: Thionyl chloride

Chemical: Sulfinyl dichloride

See: Thionyl chloride

Chemical: Sulfur

Synonym: Atomic sulfur
Sulphur
Agri-sul
Asulfa-supra
Bisulfoid
Cosan 80
CAS No: 7704-34-9
Use: Unscheduled precursor to HD and VX; byproduct of HD

Chemical: Sulfur oxychloride

See: Thionyl chloride

Chemical: Sulfur chloride

See: Sulfur monochloride

Chemical: Sulfur chloride oxide

See: Thionyl chloride

Chemical: Sulfur dichloride

Synonym: Chlorine sulfide
Dichlorosulfane
Monosulfur dichloride
Schedule: 3B
CAS No: 10545-99-0
Synthesis: Sulfur monochloride and chlorine
Catalyst: Iron, antimony, or aluminum chloride
Use: Scheduled precursor to Mustard gas and Thionyl chloride

Chemical: Sulfur monochloride

Synonym: Sulfur chloride
Disulfur dichloride
Sulfur subchloride
Thiosulfurous dichloride
Schedule: 3B
CAS No: 10025-67-9
Synthesis: 1) sulfur and chlorine; 2) carbon disulfide and chlorine, nitrogen
Catalyst: iron filings, iodine, or ferric chloride
Use: Scheduled precursor to Mustard gas, Lewisite 1, Arsenic trichloride, and Thionyl chloride

Chemical: Sulfur monochloride

Synonym: Sulfur chloride
CAS No: 10025-67-9
Use: Sulfur mustard

Chemical: Sulfur subchloride

See: Sulfur monochloride

Chemical: Sulfurous dichloride

See: Thionyl chloride

Chemical: Sulfurous oxychloride

See: Thionyl chloride

Chemical: Sulfuryl chloride

CAS No: 7791-25-5
Use: Unscheduled precursor to Sarin and HD

Chemical: Sulphur

See: Sulfur

Chemical: Sulphuret of carbon

See: Carbon disulfide

Chemical: SWS

See: Methylphosphonothioic dichloride

Chemical: T

See: O-Mustard

Chemical: T-1790

See: HN1

Chemical: T-724

See: O-Mustard

Chemical: t-Butyl chloride

Synonym: tert-Butyl chloride
2-Chloro-2-methyl propane
Propane, 2-chloro-2-methyl
CAS No: 507-20-0
Use: Unscheduled precursor to Pinacolyl alcohol

Chemical: T9

See: HN3

Chemical: Tabun

Synonym: O-Ethyl N,N-dimethylphosphoramidocyanidate
GA
Schedule: 1A
CAS No: 77-81-6
Synthesis: N,N-dimethylphosphoramidic dichloride and sodium cyanide
Use: Toxic chemical

Chemical: TBA

See: HN3

Chemical: Tedegyl

See: Bis(2-hydroxyethyl)sulfide

Chemical: Teflon

See: Polytetrafluoroethylene

Chemical: tert-Butyl chloride

See: t-Butyl chloride

Chemical: tert-Butyl methyl

keytone
See: Pinacolone

Chemical: Tetrachloromethylphosphorane

See: Methylphosphorus tetrachloride

Chemical: Tetrachlorosilane

See: Silicon tetrachloride

Chemical: Tetrafluoroethene homopolymer

See: Polytetrafluoroethylene

Chemical: Tetrafluoroethylene

Synonym: Ethane, tetrafluoro-
Tetrafluoroethylene monomer
CAS No: 116-14-3
Use: Unscheduled precursor to PFIB

Chemical: Tetrafluoroethylene monomer

See: Tetrafluoroethylene

Chemical: Tetraisopropyl orthosilicate

Synonym: Silicic acid, tetrakis (1-methylethyl) ester
CAS No: 1992-48-9
Use: Unscheduled precursor to Sarin and Soman

Chemical: Tetram

See: Amiton

Chemical: Tetramethylethylene glycol

See: 2,3-Dimethyl-2,3-butanediol

Chemical: Thiodiethylene glycol

See: Thiodiglycol

Chemical: Thiodiglycol

See: Bis(2-hydroxyethyl)

Chemical: Thionyl chloride

Synonym: Sulfurous oxychloride
Sulfurous dichloride
Sulfinyl chloride
Sulfur chloride oxide
Thionyl dichloride
Sulfur oxychloride
Sulfinyl dichloride
Schedule: 3B
CAS No: 7719-09-7
Synthesis: Sulfur monochloride and sulfur dichloride
Catalyst: Activated carbon; iron chloride
Use: Scheduled precursor to Mustard gas, Lewisite 1, HN1, DC, and Arsenic trichloride

Chemical: Thionyl dichloride

See: Thionyl chloride

Chemical: Thiosulfurous dichloride

See: Sulfur monochloride

Chemical: TR

See: Diethyl methylphosphonite

Chemical: Tributylamine

Synonym: 1-Butanamine
N,N-Dibutyl-
N,N-Dibutyl-1-butanamine
CAS No: 100-82-9
Use: Stabilizer for Soman

Chemical: Trichloro (1-chloroethenyl) silane

See: 2-Chlorovinyl-trichlorosilane

Chemical: Trichloro (2-chloroethenyl) silane

See: Trichloro (2-chloroethenyl) silicide

Chemical: Trichloro (2-chloroethenyl) silicide

Synonym: Silane, trichloro (2-chloroethenyl)-
Trichloro (2-chloroethenyl) silane
CAS No: 690-18-6
Use: Unscheduled precursor to L1-3

Chemical: Trichloroarsine

See: Arsenic trichloride

Chemical: Trichloronitromethane

See: Chloropicrin

Chemical: Triethanol ammonium chloride

See: Triethanolamine hydrochloride (HN-3)

Chemical: Triethanolamine

Synonym: Tris(2-hydroxyethyl)amine
2,2,2-Nitrilotriethanol
Trolamine
Schedule: 3B
CAS No: 102-71-6
Synthesis: Ethylene oxide and ammonia
Use: Scheduled precursor to HN3

Chemical: Triethanolamine hydrochloride (HN-3)

Synonym: Triethanolamine hydrochloride acid salt
Triethanol ammonium chloride
Tris(2-hydroxyethyl) amine hydrochloride
Ethanol, 2,2',2", -nitrilotris-, hydrochloride
CAS No: 637-39-8
Use: Nitrogen mustard

Chemical: Triethanolamine hydrochloride acid salt

See: Triethanolamine hydrochloride (HN-3)

Chemical: Triethyl ester

See: Triethyl phosphite

Chemical: Triethyl phosphite

Synonym: Phosphorus acid Triethyl ester
Schedule: 3B
CAS No: 122-52-1
Synthesis: Eethanol and phosphorus oxychloride
Catalyst: Diethylaniline or petroleum ether
Use: Scheduled precursor to DMMP

Chemical: Triethylamine, 2-chloro-, hydrochloride

See: (N,N-diethylamino) ethyl chloride hydrochloride

Chemical: Trimethyl ester

See: Trimethyl phosphite

Chemical: Trimethyl phosphite

Synonym: Trimethyl ester
Schedule: 3B
CAS No: 121-45-9
Synthesis: Phosphorus trichloride and methanol
Catalyst: Diethylaniline, petroleum ether
Use: Scheduled precursor to DMMP

Chemical: Trimethylene dichloride

See: 1,3-Dichloropropane

Chemical: Trimethylethylene

See: 2-Methyl-2-butane

Chemical: Trinitrophenol

See: Picric acid

Chemical: Triphenylcarbinol

Synonym: Trityl alcohol
Benzenemethanol, alpha-diphenyl-
Triphenylmethanol
Tritanol
CAS No: 76-84-6
Use: Stabilizer for HN2 and HN3

Chemical: Triphenylmethanol

See: Triphenylcarbinol

Chemical: Tris(.beta.-chloroethyl) amine hydrochloride

See: Tris(2-chloroethyl) amine hydrochloride

Chemical: Tris(2-hydroxyethyl) amine hydrochloride

See: Triethanolamine hydrochloride (HN-3)

Chemical: Tris(2-chloroethyl) amine hydrochloride

Synonym: Tris(.beta.-chloroethyl) amine hydrochloride
2-Chloro-N,N-bis(2-chloroethyl) ethanamine hydrochloride
Ethanamine, 2-chloro-N,N-bis(2-chloroethyl)
CAS No: 817-09-4
Use: Unscheduled precursor to HN3

Chemical: Tris(2-chloroethyl)amine

See: HN3

Chemical: Tris(2-chlorovinyl)arsine

See: Lewisite 3

Chemical: Tris(2-hydroxyethyl)amine

See: Triethanolamine

Chemical: Tritanol

See: Triphenylcarbinol

Chemical: Trityl alcohol

See: Triphenylcarbinol

Chemical: Trolamine

See: Triethanolamine

Chemical: TRS

See: O,O Diethyl methylphosphonothionate

Chemical: TZ

See: Saxitoxin

Chemical: VCL

See: Vinyl chloride

Chemical: VCM

See: Vinyl chloride

Chemical: Vinyl chloride

Synonym: Chloroethylene
1-Chloroethylene
Chloroethene VCL
Monochloroethylene
VCL
VCM
CAS No: 75-01-4
Use: Unscheduled precursor to QT

Chemical: Vinyl sulfide

See: Divinyl sulfide

Chemical: Vinylene

See: Acetylene

Chemical: Vinylsulfanylene

See: Divinyl sulfide

Chemical: VX

Synonym: O-Ethyl S-2-diisopropylaminoethyl methyl phosphonothiolate
Schedule: 1A
CAS No: 50782-69-9
Synthesis: QL and sulfur
Use: Toxic chemical

Chemical: WC-Reiniger

See: Phosphoric acid

Chemical: Yellow cross

See: See Bis(2-chloroethyl)sulfide

Chemical: YL

See: O-Ethyl methyl phosphinic acid

Chemical: YLS

See: O-Ethyl methylphosphonothiolic acid

Chemical: Yperite

See: Bis(2-chloroethyl)sulfide

CWC Chemicals

CAS No	Chemical
50-00-0	Formaldehyde
51-75-2	HN2
55-22-1	Isonicotinic acid
60-24-2	2-Hydroxyethanethiol
64-17-5	Ethanol
67-56-1	Methanol
67-63-0	Isopropanol
74-82-8	Methane
74-85-1	Ethylene
74-86-2	Acetylene
74-87-3	Methyl chloride
74-88-4	Methyl iodide
74-89-5	Methylamine
74-90-8	Hydrogen cyanide
75-01-4	Vinyl chloride
75-04-7	Ethylamine
75-05-2	Methylene chloride
75-09-2	Methylene dichloride
75-15-0	Carbon disulfide
75-21-8	Ethy lene oxide
75-44-5	Phosgene
75-83-2	2,2-Dimethylbutane
75-97-8	Pinacolone
76-06-2	Chloropicrin
76-09-5	2,3-Dimethyl-2,3 butanediol
76-84-6	Triphenylcarbinol
76-89-1	Methyl benzilate
76-93-7	2,2-Diphenyl-2 hydroxyacetic acid (benzilic acid)
77-81-6	Tabun
78-38-6	Diethyl ethylphosphonate
78-53-5	Amiton
88-89-1	Picric acid
96-64-0	Soman
96-79-7	N,N-Diisopropyl-(beta)-aminoethyl chloride
96-80-0	N,N-Diisopropyl-(beta) aminoethanol
100-35-6	2-(N,N-Diethylamino)ethyl chloride
100-38-9	N,N Diethylaminoethanethiol
100-58-3	Phenyl magnesium bromide
100-82-9	Tributylamine

CAS No	Chemical
102-71-6	Triethanolamine
105-59-9	Methyl diethanolamine
107-07-3	2-Chloroethanol
107-16-4	Hydroxyacetonitrile
107-31-3	Methyl formate
107-44-8	O-Isopropyl methylphosphonofluoridate
107-99-3	2-(N,N-Dimethylamino) ethyl chloride
108-18-9	Diisopropylamine
109-89-4	4-Methylpyridine
109-89-7	Diethylamine
111-42-2	Diethanolamine
111-46-6	Diethylene glycol
111-48-8	Bis(2-hydroxyethyl)sulfide
115-25-3	Perfluoro cyclobutane
116-14-3	Tetrafluoroethylene
116-15-4	Perfluoropropylene
119-53-9	Benzoin
121-45-9	Trimethyl phosphite
122-52-1	Triethyl phosphite
124-40-3	Dimethylamine
124-41-4	Sodium methylate
134-81-6	Benzil
139-87-7	Ethyldiethanolamine
141-43-5	Ethanolamine
141-79-7	Mesityl oxide
142-28-9	1,3-Dichloropropane
143-33-9	Sodium cyanide
151-50-8	Potassium cyanide
382-21-8	PFIB
430-78-4	Ethylphosphonous difluoride
464-07-3	Pinacolyl alcohol
497-19-8	Sodium carbonate
503-38-8	Diphosgene
505-60-2	Bis(2-chloroethyl)sulfide
506-59-2	Dimethylamine HCl
506-68-3	Cyanogen bromide
506-77-4	Cyanogen chloride
507-20-0	t-Butyl chloride
513-35-9	2-Methyl-2-butane
524-43-8	1,2-Bis(2 hydroxyethylthio)ethane
538-07-8	HN1
540-63-6	1,2-Ethanedithiol
541-25-3	Lewisite 1

CAS No	Chemical
542-88-1	Bis(chloromethyl)ether
555-77-1	HN3
589-57-1	Diethylphosphorachloridite
627-51-0	Divinyl sulfide
628-76-2	1,5-Dichloro-n-pentane
637-39-8	Triethanolamine hydrochloride (HN-3)
676-83-5	Methylphosphonous dichloride
676-97-1	Methylphosphonyl dichloride
676-98-2	Methylphosphonothioic dichloride
676-99-3	Methylphosphonyl difluoride
677-43-0	N,N Dimethylphosphoramidic dichloride
690-18-6	Trichloro (2-chloroethenyl) silicide
691-96-3	O,O-Diisopropyl hydrogenphosphonate
753-59-3	Methylphosphonous difluoride
753-98-0	Ethylphosphonyl difluoride
756-79-6	Dimethyl methylphosphonate
762-04-9	Diethyl phosphite
814-49-3	O,O Diethylphosphorochloridate
817-09-4	Tris(2-chloroethyl) amine hydrochloride
868-85-9	Dimethyl phosphite
869-24-9	(N,N-diethylamino) ethyl chloride hydrochloride
1002-41-1	Bis(2-chloroethyl) disulfide
1066-50-8	Ethylphosphonic dichloride
1066-52-0	Methyl methylphosphonochloridate
1066-53-1	O-Methyl methylphosphonate
1070-90-2	1,2-Dimethyldiphosphonic acid
1189-87-3	O-Isopropyl ethylphosphonofluoridate

CAS No	Chemical
1193-65-3	3-Quinuclidinone hydrochloride
1310-73-1	Sodium hydroxide
1313-82-2	Sodium sulfide
1314-56-3	Phosphorus pentoxide
1314-80-3	Phosphorus pentasulfide
1333-83-1	Sodium bifluoride
1445-75-6	DIMP
1445-76-7	Chlorosarin
1498-40-4	Ethylphosphonous dichloride
1570-45-2	Ethyl isonicotinate
1619-34-7	Quinuclidine-3-ol
1627-53-3	Arsenic trioxide
1809-20-7	Diisopropyl phosphonate
1809-20-9	DIHP
1838-39-7	1-Carbethoxymethyl-4-carbethoxypiperidine
1992-48-9	Tetraisopropyl orthosilicate
2404-03-7	Diethyl N,N-dimethyl phosphoramidate
2441-27-2	2-Chlorovinyl-trichlorosilane
2510-93-2	O-Ethyl N,N-dimethyl phosphoramidochloridate
2524-04-1	O,O-Diethyl phosphorothionochloridate
2625-76-5	2-Chloroethylchloromethylsulfide
2632-87-3	O,O-Diethyl N,N dimethylphosphoramidite
2725-68-0	Methylphosphorus tetrachloride
3238-75-3	2-(N,N-Dipropylamino) ethanol
3554-74-3	3-Hydroxy-1 methylpiperdine
3563-36-8	Sesquimustard
3731-38-2	3-Quinuclidinone
4083-88-9	“Perren-Kinnear” complex
4261-68-1	2-(N,N-Diisopropylamino) ethyl chloride hydrochloride
4535-86-8	(N,N-Dipropylamino) ethyl chloride hydrochloride
4584-46-7	(N,N-Dimethylamino) ethyl chloride hydrochloride
5842-07-9	N,N Diisopropylaminoethanethiol
6163-75-3	Dimethyl ethylphosphonate

CAS No	Chemical
6581-11-1	BZ
6996-81-2	O,O Diethyl methylphosphonothionate
7040-57-5	Chlorosoman
7040-58-6	O,O-Dipinacolyl methylphosphonate
7426-02-0	Bis(2-hydroxyethylthioethyl)ether
7440-23-5	Sodium
7446-70-0	Aluminum chloride
7447-39-4	Cupric chloride
7487-94-7	Mercuric chloride
7647-01-0	Hydrochloric acid (HCl)
7664-38-2	Phosphoric acid
7664-39-3	Hydrogen fluoride
7664-41-7	Ammonia
7681-49-4	Sodium fluoride
7704-34-9	Sulfur
7719-09-7	Thionyl chloride
7719-12-2	Phosphorus trichloride
7782-50-5	Chlorine
7784-34-1	Arsenic trichloride
7789-23-3	Potassium fluoride
7789-29-9	Potassium bifluoride
7791-25-5	Sulfuryl chloride
9002-84-0	Polytetrafluoroethylene
9009-86-3	Ricin
10025-67-9	Sulfur monochloride
10025-67-9	Sulfur monochloride sulfur chloride
10025-87-3	Phosphorus oxychloride
10026-04-7	Silicon tetrachloride
10026-13-8	Phosphorus pentachloride
10545-99-0	Sulfur dichloride
15715-41-0	Diethyl methylphosphonite
16260-48-3	1,3-Bis(2-hydroxyethylthio)-n-propane
16391-07-4	O-Ethyl methyl phosphinic acid
16853-85-3	Lithium aluminum hydride
16940-66-2	Sodium borohydride
18005-40-8	O-Ethyl methylphosphonothiolic acid
23306-80-1	N,N-Diisopropyl phosphoramidic dichloride
27344-79-2	Sodium diisopropyl phosphonate

CAS No	Chemical
35523-89-8	Saxitoxin
36716-60-6	2-(N,N-Dipropylamino) ethyl chloride
40334-69-8	Lewisite 2
40334-70-1	Lewisite 3
40881-98-9	N,N Dipropylphosphoramidic dichloride
44860-68-6	Bis(2-hydroxyethylthio)methane
50782-69-9	VX
57856-11-8	O-Ethyl,2-diisopropyl aminoethyl methylphosphonate
57856-12-9	Bis(2-diisopropylamino ethyl) methylphosphonite
63869-13-6	Bis(2-chloroethylthio)methane
63905-10-2	1,3-Bis(2-chloroethylthio) npropane
63918-89-8	O-Mustard
63918-90-1	Bis(2-chloroethylthiomethyl)ether
71840-25-0	O-Ethyl O-2-Diisopropulaminoethyl methylphosphonothionate
73207-98-4	S-2-Diisopropylaminoethyl methylphosphonothioic acid
97931-20-9	O-Pinacolyl ethylphosphonofluoridate
118080-94-7	Sodium O,O-diethyl phosphite
135469-38-4	3,3-Diemethylbutane-2-sulfonic acid
142868-93-7	1,4-Bis(2-chloroethylthio) nbutane
142868-94-8	1,5-Bis(2-chloroethylthio) npentane

List of Abbreviations

(Excluding Chemical Names)

CAS	Chemical Abstracts Service
CWC	Chemical Weapons Convention
DTIRP	Defense Treaty Inspection Readiness Program
DTRA	Defense Threat Reduction Agency
EIF	Entry Into Force

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Video

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Video

951V Arms Control Site Vulnerability Assessments
Video

952V Arms Control Security Countermeasures: Selection & Application
Video

953V Arms Control Inspection: Site & Building Preparation
Video

954T Why TEI?
Tri-fold Brochure

Notes