Recording of Substances for the Hazardous Substances (Exempt Laboratory) Regulations - An Indicative List

Contents

Introduction

The Hazardous Substances (Exempt Laboratory) Regulations require that an accurate record of substances will be kept of substances listed in Schedule 1 of the Hazardous Substances (Tracking) Regulations.

These are chemicals or substances falling in the following HSNO Classes:
Classes 3.1A and 3.2A
Classes 4.1.2A and 4.1.2B
Class 4.1.3A
Classes 4.2A and 4.3A
Class 5.1.1A
Classes 5.2A and 5.2B
Classes 6.1A, 6.1B and 6.1C
Classes 9.1A, 9.2A, 9.3A and 9.4A

In addition, an accurate record of quantities of all Class 1 substances is required.

The following is an indicative list of some of these compounds. A list of compounds in Schedule 1 of the Chemical Weapons (Prohibition) Act is also included. Neither list is intended to be comprehensive or exhaustive.

HSNO 3.1A Flammable Liquids

Acetaldehyde	75-07-0

Carbon disulfide	75-15-0
Diethyl ether	60-29-7
Isopentane	78-78-4
Isoproylamine	108-18-9
n-Pentane	109-66-0
propylene oxide	75-56-9
Trimethylamine	121-44-8
Vinyl ethyl ether	109-92-2

HSNO Class 3.2A Liquid desensitised explosives

Nitroglycerin and nitrocellulose mixed with ethanol

HSNO Class 4.1.3A Solid desensitised explosives

Ammonium picrate (wetted with not less than 10% water by mass)
Nitroguanidine (wetted with not less than 20% water by mass) 556-88-7
Trinitrophenol [picric acid] (wetted with not less than 30% water by mass) 88-89-1
Silver picrate (wetted with not less than 30% water by mass)
Sodium dinitro-o-cresolate (wetted with not less than 15% water by mass)
Sodium picramate (wetted with not less than 20% water by mass)
Trinitrobenzene (wetted with not less than 30% water by mass) 99-35-4
Trinitrobenzoic acid (wetted with not less than 30% water by mass) 129-66-8
Trinitrotoluene (wetted with not less than 30% water by mass) 118-96-7
Urea nitrate (wetted with not less than 20% water by mass)
Barium azide (wetted with not less than 50% water by mass) 18810-58-7
Dipicryl sulphide (wetted with not less than 10% water by mass)
2-amino-4,6-dinitrophenol (picramic acid)
(wetted with not less than 20% water by mass) 96-91-3

HSNO 4.1.2 A and B - Reactive Solids

Acetylides

All including:

Copper (I) acetylide	1117-94-8
Copper (II) acetylide	12540-13-5
Mercury acetylide	68833-55-6
Silver acetylide	7659-31-6
Sodium acetylide	2881-62-1

Fulminates

All including:	
Copper(II) fulminate	22620-90-2
Mercury fulminate	628-86-4
Silver fulminate	5610-59-3
Sodium fulminate	15736-98-8

Azides

Barium azide	18810-58-7
Lead (II) azide	13424-46-9
Lead (IV) azide	73513-16-3
Silver azide	13863-88-2
Copper (I) azide	14336-80-2
Copper (II) azide	14212-30-6

(Sodium azide is not included)

HSNO 4.2A Reactive solids

Diethyl zinc	110-54-3
Dimethyl zinc	544-97-8
Calcium	7440-70-2
Hafnium	7440-58-6
Magnesium diphenyl	555-54-4
Pentaborane	18433-84-6
Phosphorus (white or yellow)	7723-14-0
Titanium	7740-32-6
Tributyl Phosphine	998-40-3

Aluminium alkyl hydrides
Aluminium alkyl halides
Lithium alkyls
Metal alkyl halides

HSNO 4.3A Solids that emit flammable gases

Aluminium borohydride	16962-07-5
Aluminium hydride	7704-21-6
Aluminium Phosphide	2089-73-8
Boron trifluoride dimethyl etherate	353-42-4

Caesium	7440-46-2
Calcium carbide	75-20-7
Calcium hydride	7789-78-7
Calcium phosphide	1305-99-3
Lithium	7739-93-2
Lithium aluminium hydride	6853-85-3
Lithium borohydride	16949-15-8
Lithium hydride	7550-67-8
Magnesium powder	7439-95-4
Magnesium Aluminium phosphide	na
Magnesium hydride	7693-27-8
Magnesium phosphide	12057-74-8
Phosphorous pentasulfide	1314-80-3
Potassium	7440-09-7
Potassium borohydride	13762-51-1
Potassium hydride	7693-26-7
Potassium phosphide	20770-41-6
Rubidium	7440-17-7
Sodium	7440-23-5
Sodium borohydride	16940-66-2
Sodium hydride	7646-69-7
Sodium phosphide	12058-85-4
Strontium phosphide	12504-13-1
Zirconium hydride	7704-99-6

HSNO 5.1.1A - Oxidising Compounds

Ammonium nitrate	6484-52-2
Perchloric acid	7601-90-3
Potassium peroxide	17014-71-0
Potassium dioxide	12030-08-5
Sodium dioxide	12034-12-7
Sodium peroxide	1313-60-6
Tetranitro methane	509-14-8

HSNO 5.2A and B - Organic Peroxides Types A and B

Acetyl cyclohexanesulfonyl peroxide
tert-Amylperoxy-3,5,5-trimethylheanoate
tert-Butyl monoperoxymaleate
tert-Butyl monoperoxypthalate
tert-Butyl peroxyacetate
tert-Butyl peroxybutyrate
Dibenzoyl peroxide (77 -100%)
1,1-DI(tert-Butylperoxy)-3,3,5-trimethylcyclohexane (100%)

Dicyclohexyl Peroxydicarbonate
Diisobutyryl peroxide
Diisopropyl Peroxydicarbonate
Di-(2-methylbenzoyl) peroxide
2,5-dimethyl-2,5-di-(benzoylperoxy)hexane
2,5-dimethyl-2,5-di-(tert-Butylperoxy)hexyne (>86%)
Di-(2-phenoxyethyl) peroxydicarbonate
Disuccinic acid peroxide
3,3,6,6,9,9-hexamethyl-1,2,4,5-teraoxacyclonone (>50%)
Methyl ethyl ketone peroxide

HSNO 6.1 A, B and C - Toxic Compounds

HSNO 6.1A	
Cyanogen Bromide	506-68-3
Cycloheximide	66-81-9
Hydrogen cyanide	74-90-8
Mercury (II) oxide	21908-53-2
Potassium Cyanide	151-50-8
Sodium Cyanide	143-33-9

HSNO 6.1B	
Calciferol	50-14-6
Cyanogen Bromide	506-68-3
Di-n-butyltin diacetate	1067-33-0
Digitonin	11024-24-1
Mercury (II) acetate	6129-23-3
Mercury (II) nitrate	10045-94-0
Mercuric cyanide	592-04-01
Mercury (II) dithiocyanate	592-85-8
Dimethylene diisothiocyanate	3688-08-2
Nicotine	54-11-5
Nicotine HCl	2920-51-1
Pentachlorophenol	87-85-56
Phenylarsonic acid	98-05-5
Phosphorous	23-14-0
Potassium silver cyanide	506-61-6
Sodium selenite	10102-18-8
Sodium fluoride	7681-49-4
Sodium metavanadate	13718-26-8
Tetraethyl lead	78-00-0

HSNO 6.1C	
Acrylamide	79-06-1
Acrylamide solutions (>30% acrylamide)	79-06-1
Alkyl lead	

Allylthiourea	109-57-9
Ammonium metavanadate	7803-55-6
Aniline	62-53-3
Arsenic trichloride	7784-34-1
Arsenic trioxide	327-53-3
Berylllium	7440-41-7
Boron trifluoride	7637-07-2
Cadmium	7440-43-9
Cetylpyridinium chloride	12303-5
Chloropicrin	76-06-02
Chromium trioxide	1333-82-0
Di-n-butyltin dilaurate	77-58-7
Dimethyl sulphate	77-78-1
Ethylene dibromide	106-93-4
Ethylene oxide	72-21-8
Formaldehyde solution (40%)	50-00-0
Furfuraldehyde	98-01-1
Hydrazine hydrate	7803-57-8
Hydrazine (30-60%)	302-01-2
Hydrazinium chloride	2644-70-4
Hydrogen cyanamide	420-04-02
Hydrogen fluoride	7664-39-3
Lithium fluoride	7789-24-4
Mercaptoacetic acid(Thioglycollic acid)	68-11-1
2-Mercaptoethanol	60-24-2
Mercury (II) chloride	10112-91-1
Mercury (I) iodide	7783-30-4
Mercury (I) nitrate	10415-75-5
Mercury (II) sulphate	7783-5-9
Metaldehyde	108-62-3
3-Methylbenzothiazol-2-one hydrochloride (MBTH)	38894-11-0
Methyl isothiocyanate	556-61-6
Methyl orange	547-58-0
Nicotine hydrogen tartrate	105-31-6
Nitrobenzene	98-95-3
Osmium (IV) tetraoxide	10026-04-6
1,10-Phenanthroline hydrate	5144-89-8
Selenium dioxide	7446-08-14
Sodium nitrite	7632-00-0
Sodium selenate	13410-01-0
Tetraphenylarsonium chloride	507-28-8
Thallium compounds	
Thiomersal	54-64-8
Toluene Diisocyanate	584-84-9

Toxic gases

HSNO 6.1A	
Phosphine gas	77-44-5
HSNO 6.1B	
Chlorine	7782-50-5
Hydrogen Cyanide	74-90-8
Hydrogen sulfide	7783-06-4
Methyl bromide	74-83-9
Nitrogen dioxide	10102-44-0
HSNO 6.1C	
Carbon monoxide	630-08-01

Alkaloids and toxins

HSNO 6.1A	
□□aminitin	21150-20-9
□□aminitin	21150-22-1
□□aminitin	21150-23-2
□□aminitin	21705-02-2
amanin	21150-21-0
Aconitine	302-27-2
Colchicine	64-86-8
Feraconitine	127-29-7
Physostigmine	57-47-6
Physostigmine salycylate	57-47-6
Physostigmine sulfate	64-64-7
Saxitoxin	35523-89-8
HSNO 6.1B	
Brucine	357-57-3
Strychnine	57-24-9
Strychnine salts	

Venoms with LD50 (ip or iv) less than 500 □g/kg (all HSNO 6.1A)

Snake (N naja)
Snake (B asper)
Snake (H major)
Seawasp (C fleckeri)
Ant (P badius)
Frog (P bicolor)
Scorpion (C noxious)

Compounds included in Schedule 1 of the Chemical Weapons (Prohibition) Act

<u>O-alkyl-phosphonofluoridates including:</u>	
Sarin	107-44-8
Soman	96-64-0
Di-isopropylfluorophosphate (DFP)	55-91-4
Dimethyl fluorophosphate	5954-50-7
Methylcyclohexyl fluorophosphate)(GF)	329-99-7
<u>O-alkyl-N,N dialkyl phosphoramidocyanidates</u>	
Tabun	77-81-6
<u>O-alkyl s-2-dialkyl-aminoalkylphosphonothiolates</u>	
VX	50782-69-9
<u>Sulfur mustards</u>	
2-chloroethylchloromethylsulfide	2625-76-5
Bis(2-chloroethylsulfide)	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
<u>Lewisites</u>	
Lewisite 1: 2-chlorovinyldichloroarsine	541-25-3
Lewisite 2: Bis(2-chlorovinyl)chloroarsine	40334-69-8
Lewisite 3: Tris(chlorovinyl)arsine	40334-70-1
<u>Nitrogen mustards</u>	
HN1: Bis(2-chloroethyl)ethylamine	538-07-8
HN2: Bis(2-chloroethyl)methylamine	51-75-2
HN3: Tris(2-chloroethyl)amine	555-77-1
Ricin	9009-86-3