



Government Gazette

REPUBLIC OF SOUTH AFRICA

Vol. 442 Pretoria 10 April 2002 No. 23309



AIDS HELPLINE: 0800-0123-22 Prevention is the cure

GOVERNMENT NOTICE

DEPARTMENT OF TRADE AND INDUSTRY

No. 431

10 April 2002

**THE NON-PROLIFERATION OF WEAPONS OF MASS DESTRUCTION
ACT, 1993 (ACT NO. 87 OF 1993)****DRAFT NOTICE REGARDING CHEMICALS RELATED TO WEAPONS
OF MASS DESTRUCTION**

The Minister of Trade and Industry intends, in terms of section 13 of the Non-proliferation of Weapons of Mass Destruction Act, 1993 on the recommendation of the South African Council for the Non-proliferation of Weapons of Mass Destruction, to declare the goods as contained in the notice to be controlled goods.

Interested persons are invited to submit any substantiated comments or representations on the proposed notice to the Director General of Trade and Industry, Private Bag X84, Pretoria, 0001 (for the attention of the Director: Non-proliferation and Space), within 21 days of the date of publication of this notice.



A. ERWIN

MINISTER OF TRADE AND INDUSTRY

**DRAFT NOTICE UNDER SECTION 13 OF THE NON-PROLIFERATION OF WEAPONS OF MASS DESTRUCTION ACT, 1993 (ACT NO. 87 OF 1993):
DECLARATION OF CERTAIN GOODS TO BE CONTROLLED GOODS AND
CONTROL MEASURES APPLICABLE TO SUCH GOODS**

I, Alec Erwin, Minister of Trade and Industry, on the recommendation of the South African Council for the Non-Proliferation of Weapons of Mass Destruction and under section 13 of the Non-Proliferation of Weapons of Mass Destruction Act, 1993 (Act No. 87 of 1993), hereby -

- (a) declare the following goods to be controlled goods:
- (i) the chemicals listed in Schedules 1, 2 and 3 of Annex B of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, hereinafter referred to as "the Convention" ^{1 and 2} as well as the chemicals listed in Annexure D;
 - (ii) any chemical plant site, comprising any number of chemical plants, within which was produced a total aggregate quantity of 100 tonnes or more of any number of unscheduled discrete organic chemicals (DOCs including PSF chemicals) during the previous calendar year; excluding for the purposes of this paragraph, chemical plants that exclusively produce explosives or hydrocarbons, or compounds containing only carbon and a metal (e.g. tungsten carbide); with polymeric and oligomeric substances furthermore not regarded as unscheduled discrete organic chemicals for purposes of this paragraph;
 - (iii) any chemical plant site, comprising any number of chemical plants, within which

1) Copies of Schedules 1, 2 and 3 of Annex B of the Convention are attached as Annexures A, B and C, respectively, for ease of reference.

2) NOTE: Whenever reference is made to groups of di-alkylated chemicals, followed by a list of alkyl groups in parentheses, all chemicals possible by all possible combinations of alkyl groups listed in the parentheses are considered to be listed in the relevant Schedule as long as they are not explicitly exempted.

was produced more than an aggregate quantity of 15 tonnes of any single unscheduled discrete organic chemical containing the elements phosphorus, sulphur or fluorine (PSF chemical); excluding, for the purposes of this paragraph, chemical plants that exclusively produce explosives or hydrocarbons or compounds containing only carbon and a metal (e.g. tungsten carbide); with polymeric and oligomeric substances furthermore not regarded as unscheduled discrete organic chemicals for purposes of this paragraph;

- (iv) riot control agents, only when possessed in quantities greater than or equal to an aggregate quantity of 100 kg per calendar year, whether in substantially pure form or in a mixture with any other substance;
 - (v) toxic chemicals and their precursors, except where intended for purposes not prohibited under the Convention, provided that the types and quantities are consistent with such purposes;
 - (vi) munitions and devices specifically designed to cause death or other harm through the toxic properties of toxic chemicals which would be released as a result of the employment of such munitions or devices; and
 - (vii) any equipment specifically designed for use directly in connection with the employment of munitions and devices specified in subparagraph (v) above;
- (b) require that in the declaration to the Council in accordance with the provisions of the Convention, read with the Chemical Weapons Regulations published in Government Notice No. R. 705 of 23 May 1997, the following threshold quantities for controlled goods shall apply:
- (i) Schedule 1 chemicals:

All quantities above zero per calendar year, whether in substantially pure form or in a mixture with any other substance, with regard to the manufacture, procurement in any manner, use, operation, stockpiling, maintenance, transport, import, export, transit or re-export of such goods;
 - (ii) Schedule 2 chemicals:
 - 2A Toxic chemicals:

1 kg per calendar year

exception: BZ: 3-Quinuclidinyl benzilate: 10 g per calendar year;
 - 2B Precursors:

10 kg per calendar year

with regard to the manufacture, procurement in any manner, processing, consumption, stockpiling, import, export, transit or re-export of such goods;

- (iii) Schedule 3 chemicals:
1 tonne per calendar year

with regard to the manufacture, import, export or re-export of such goods;

- (iv) DOC chemicals:
100 tonnes per calendar year

with regard to the manufacture of DOC chemicals for a chemical plant site; and

- (v) PSF DOC chemicals:
15 tonnes per calendar year

with regard to the manufacture of PSF DOC chemicals for a chemical plant site;

- (c) require that for purposes of the interpretation of paragraph (b) -

- (i) all threshold quantities shall be aggregate quantities over an entire calendar year;
- (ii) threshold quantities shall include quantities of controlled chemicals generated as by-products or as components of waste or effluent streams in a chemical production process;
- (iii) where Schedule 2B chemicals and Schedule 3 chemicals occur in a mixture with any other substance(s), the specified threshold quantity of the scheduled chemical in the mixture shall be exceeded and the chemical shall be present in the mixture in a concentration greater than or equal to 30% by weight for declarations of Schedule 2B chemicals and Schedule 3 chemicals;
- (iv) where Schedule 2A chemicals occur in a mixture with any other substance(s), the specified threshold quantity of the scheduled chemical in the mixture shall be exceeded and the chemical shall be present in the mixture in a concentration greater than or equal to 0,5% by weight for declarations of Schedule 2A chemicals;
- (v) the application of the provisions of paragraph 31 of Part VII of the Verification Annex of the Convention with regard to the transfers of Schedule 2 chemicals

to and from States not party to the Convention shall not apply to -

- (aa) products containing 1% or less of a Schedule 2A chemical;
 - (bb) products containing 10% or less of a Schedule 2B chemical; and
 - (cc) products identified as consumer goods packaged for retail sale for personal use or packaged for individual use;
- (vi) for quantities of 5 milligrams or less, the Schedule 1 chemical saxitoxin shall not be subject to the notification period in paragraph 5 of Part VI of the Convention if the transfer is made for medical or diagnostic purposes, and in such cases the notification shall be made by the time of transfer; and
- (vii) ricin becomes declarable when it is extracted from the plant material (crude extract); ricin remains accountable as long as the A-S-S-B bond is not broken, irrespective of the isoform(s) present and also applies to the toxic mutants of ricin; and castor oil processing plants are not subject to the Convention's reporting procedures under Schedule 1;
- (d) determine that the import, export, re-export or transit of goods listed in Annexures A, B and C shall take place under a permit issued by the Council;
- (e) determine that the export or re-export of goods listed in Annexure D shall take place under an export permit issued by the Council; and
- (f) control the import, export, re-export or transit of such goods -
- (i) by authorizing the Council to demand, on behalf of the Republic -
 - (aa) an end-use certificate for controlled goods to be transferred to the territory of any other country; and
 - (bb) a State-to-State assurance from the government of the recipient country stating that such government undertakes to ensure that the goods are not used for purposes prohibited under the Convention or in any other way for the proliferation of weapons of mass destruction;
 - (ii) by determining that for the transfer of Schedule 3 chemicals to States not party to the Convention, end-use certificates are not required for products containing 30% or less of a Schedule 3 chemical; and for products identified as consumer goods packaged for retail sale for personal use, or packaged for individual use;

- (iii) by requiring the end-use certificate contemplated in subparagraph (i) (aa) to provide the information and assurance to the Council as determined by the Council from time to time, reflecting the provisions of section C of Part VII and section C of Part VIII of the Verification Annex of the Convention;
- (iv) by requiring that where an end-use certificate is demanded by the Council as contemplated in subparagraph (i) (aa), it shall be obtained by the applicant from the end-user(s) in the country of destination of the transferred goods;
- (v) by requiring the applicant to take all reasonable steps to cooperate with the Council to prove the authenticity of the said end-use certificate; and
- (vi) by requiring any person in control of any facility in which any Schedule 1 chemical, in any amount, is produced, consumed, processed, acquired or retained, or from which such a Schedule 1 chemical may be transferred, to operate under a permit issued specifically for that purpose by the Council.

Government Notice No. 704 of 23 May 1997 is hereby withdrawn.

ANNEXURE A

(a) Schedule 1

| | | (CAS registry number) |
|------|--|-----------------------|
| A. | Toxic chemicals: | |
| (1) | O-Alkyl ($\leq C_{10}$, including cycloalkyl) alkyl (Me, Et, n-Pr or i-Pr)-phosphonofluoridates | |
| e.g. | Sarin: O-Isopropyl methylphosphono- fluoridate | (107-44-8) |
| | Soman: O-Pinacolyl methylphosphono- fluoridate | (96-64-0) |
| (2) | O-Alkyl ($\leq C_{10}$, including cycloalkyl) N,N-Dialkyl (Me, Et, n-Pr or i-Pr) phosphoramidocyanidates | |
| e.g. | Tabun: O-Ethyl N,N-dimethyl phosphoramidocyanidate | (77-81-6) |
| (3) | O-Alkyl (H or $\leq C_{10}$, including cycloalkyl) S-2-dialkyl (Me, Et, n-Pr or i-Pr)- aminoethyl alkyl (Me, Et, n-Pr or i-Pr) phosphonothiolates and corresponding alkylated or protonated salts | |
| e.g. | VX: O-Ethyl S-2-diisopropylaminoethyl methyl phosphonothiolate | (50782-69-9) |
| (4) | Sulphur mustards: | |
| | 2-Chloroethylchloromethylsulphide | (2625-76-5) |
| | Mustard gas: Bis(2-chloroethyl) sulphide | (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-Chlorovinylchloroarsine | (541-25-3) |
| Lewisite 2: | Bis(2-chlorovinyl)chloroarsine | (40334-69-8) |
| Lewisite 3: | Tris(2-chlorovinyl)arsine | (40334-70-1) |

(6) Nitrogen mustards:

| | | |
|------|-------------------------------|------------|
| HN1: | Bis(2-chloroethyl)ethylamine | (538-07-8) |
| HN2: | Bis(2-chloroethyl)methylamine | (51-75-2) |
| HN3: | 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) phosphonyl-difluorides

| | | |
|----------|----------------------------|------------|
| e.g. DF: | Methylphosphonyldifluoride | (676-99-3) |
|----------|----------------------------|------------|

(10) O-Alkyl (H or $\leq C_{10}$, including cycloalkyl) O-2-dialkyl (Me, Et, n-Pr or i-Pr)-aminoethyl alkyl (Me, Et, n-Pr or i-Pr) phosphonites and corresponding alkylated or protonated salts

| | | |
|----------|---|--------------|
| e.g. QL: | O-Ethyl O-2-diisopropylaminoethyl methylphosphonite | (57856-11-8) |
|----------|---|--------------|

(11) Chlorosarin:

| | |
|--|-------------|
| O-Isopropyl methylphosphono-chloridate | (1445-76-7) |
|--|-------------|

(12) Chlorosoman:

| | |
|--|-------------|
| O-Pinacolyl methylphosphono-chloridate | (7040-57-5) |
|--|-------------|

ANNEXURE B

(b) Schedule 2

A. Toxic chemicals:

- (1) Amiton:
O,O-Diethyl S-[2-(diethylamino)
ethyl] phosphorothiolate (78-53-5)
and corresponding alkylated or
protonated salts
- (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 not
further carbon atoms.
- e.g. Methylphosphonyl dichloride (676-97-1)
- Dimethyl methylphosphonate (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) | Quinuclidin-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) |
| | Protonated salts of N,N-Diethylaminoethanol | (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)sulphide | (111-48-8) |
| (14) | Pinacolyl alcohol: 3,3-Dimethylbutan-2-ol | (464-07-3) |

ANNEXURE C

(c) Schedule 3

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) | Sulphur monochloride | (10025-67-9) |
| (13) | Sulphur 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) |

ANNEXURE D

| | | |
|------|-------------------------------|-------------|
| (1) | 3-Hydroxy-1-methylpiperidine | (3554-74-3) |
| (2) | Potassium fluoride | (7789-23-3) |
| (3) | 2-Chloroethanol | (107-07-3) |
| (4) | Dimethylamine | (124-40-3) |
| (5) | Dimethylamine hydrochloride | (506-59-2) |
| (6) | Hydrogen fluoride | (7664-39-3) |
| (7) | Methyl benzilate | (76-89-1) |
| (8) | 3-Quinuclidone | (3731-38-2) |
| (9) | Pinacolone | (75-97-8) |
| (10) | Potassium cyanide | (151-50-8) |
| (11) | Potassium bifluoride | (7789-29-9) |
| (12) | Ammonium bifluoride | (1341-49-7) |
| (13) | Sodium bifluoride | 1333-83-1 |
| (14) | Sodium fluoride | (7681-49-4) |
| (15) | Sodium cyanide | (143-33-9) |
| (16) | Phosphorus pentasulphide | (1314-80-3) |
| (17) | Di-isopropylamine | (08-18-9) |
| (18) | Diethylaminoethanol | (100-37-8) |
| (19) | Sodium sulphide | (1313-82-2) |
| (20) | Triethanolamine hydrochloride | (637-39-8) |