

STANFORD UNIVERSITY
Controlled Substances & Precursor Chemicals Program

CONTENTS

INTRODUCTION

REGULATIONS

CONTROLLED SUBSTANCES MANAGEMENT

Responsibilities

Use Authorization & Purchasing

Central Receiving & Dispensing

Inventory & Recordkeeping

Storage & Security

Transfer

Disposal

PRECURSOR CHEMICALS MANAGEMENT

APPENDICES

A. List of Federal DEA Schedules of Controlled Substances

B. List of Federal DEA List I and II Chemicals

C. List of California Department of Justice Precursor Chemicals

STANFORD UNIVERSITY
Controlled Substances & Precursor Chemicals Program

INTRODUCTION

Research use of selected drugs and precursor chemicals are regulated by the Federal Drug Enforcement Administration (DEA) and California Department of Justice (CA-DOJ). To assist Stanford personnel comply with these regulations and Stanford University policy, specific institutional requirements have been established for the management of controlled substances and precursor chemicals.

Scope of Program & Institutional Registration: This Program and Stanford University's Institutional Registration with the DEA covers Schedule II-V controlled substances regulated by the DEA (see Appendix A) *and* precursor chemicals regulated by the DEA (see Appendix B) and CA-DOJ (see Appendix C) used in research at the main Stanford University campus.

Exclusions: Stanford University's Program and institutional DEA registration **does not** cover:

1. **Individuals with personal DEA registrations.** Any individual possessing a personal DEA registration for research use is prohibited from filing controlled substance purchase requests under the University's Program. In accordance with their personal DEA registration such persons shall be individually responsible for proper purchasing, recordkeeping, disposal and other regulated practices.
2. **Use of controlled substances in patient-care at Stanford University.** Pharmacists and physicians supporting Vaden Student Health Services and other SU clinics shall solely operate under their own DEA registrations.
3. **Use of any Schedule I drug.** Faculty and senior research staff must independently obtain individual DEA registrations. Individual registration can be processed by submitting Form 225 to the DEA, which is available at http://www.deadiversion.usdoj.gov/21cfr/cfr/1301/1301_13.htm.
4. **Off-campus use of controlled substances and precursor chemicals.** When performing research at a non-Stanford facility (such as the Veterans Administration Palo Alto Health Care System - VAPAHSC) and Stanford's off-campus research locations, SU faculty will be subject to the host institution's controlled substance program or if one does not exist, will need to register independently for an individual DEA registration as indicated in Exclusion 3.

STANFORD UNIVERSITY
Controlled Substances & Precursor Chemicals Program

REGULATIONS

Compliance with federal and state laws and university procedures governing controlled substances and precursor chemicals is required by all individuals and groups associated with Stanford University. These regulations include the following:

1. Code of Federal Regulations: Title 21, Chapter II (Parts 1300 to end) – These regulations implement the Controlled Substances Act of 1970, the Diversion Control Amendments of 1984, 1985, 1986 and subsequent amendments (<http://www.deadiversion.usdoj.gov/21cfr/cfr/index.html>).
2. Health and Safety Code Division 10: California Uniform Controlled Substances Act. (<http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=11001-12000&file=11100-11107.1>).

STANFORD UNIVERSITY
Controlled Substances & Precursor Chemicals Program

CONTROLLED SUBSTANCES MANAGEMENT

Responsibilities

1.0 Environmental Health & Safety

Stanford University's Department of Environmental Health & Safety (EH&S) manages the institutional program which:

1. Oversees initiation and maintenance of the institutional research registration for DEA Schedule II – V controlled substances.
2. Coordinates research authorizations for use and transfer of controlled substances involving the University's DEA registration.
3. Procures and dispenses orders for controlled substances used in research.
4. Performs periodic compliance inspections.
5. Coordinates the initial and biennial campus-wide inventories and submits report to the DEA
6. Communicates with agencies on all compliance issues, including report lost or stolen controlled substances.
7. Provides for appropriate disposal of controlled substances (Schedule II-V) obtained under SU's institutional DEA registration.

2.0 Participating Faculty/Senior Research Staff

Participating Faculty/Senior Research Staff are those staff who have enrolled under the University's Program for their research involving the use Schedule II – V controlled substances. Enrolling involves seeking EH&S's approval, which includes submittal of *SU Controlled Substance Purchase Request Application (Form 1a)* & *SU Controlled Substance Authorized Researcher Application (Form 2)*, and a "Start-up Lab Inspection."

In order for Stanford University to ensure compliance and maintain its institutional DEA registration, it is critical that participating faculty and senior research staff clearly understand their responsibilities, as follows:

1. Comply with university, federal and state regulations pertaining to the possession of controlled substances via adherence to *Stanford University's Controlled Substances & Precursor Chemicals Program*.
2. Maintain strict control over inventory and security for controlled substances.
3. Ensure that controlled substances are NOT intermingled in any manner (usage, storage, etc.) with those controlled substances owned by other individual(s) or other sources.
4. Ensure Schedule II controlled substance inventory and records are maintained separately from Schedule III – V controlled substances.
5. Apply for authorization from the Research Advisory Panel of California (RAPC), if research involves Schedule I Controlled Substances, Human Research (involving Schedule I or II CS), or drug abuse treatment research.
6. Ensure necessary researcher authorization for individuals in the laboratory who are assigned to work with controlled substances (e.g., staff, graduate students, post-docs, visiting scholars or co-faculty) and maintain documentation to verify currently authorized researchers.
7. Provide training to Authorized Researchers on laboratory-specific operations involving controlled substances and precursor chemicals. Provide information on the health hazards of

STANFORD UNIVERSITY

Controlled Substances & Precursor Chemicals Program

the substances, including local and systemic toxicity, and the conditions and situations that could result in exposure. Retain training records for at least one year.

8. Ensure Authorized Researchers receive, store, use, dispose of, and continually maintain usage log sheets and on-line chemical inventory management system for controlled substances per the University's Program. Maintain usage logs for 2 years after complete use or disposal of Controlled Substance.
9. Ensure that periodic self-inspections are conducted minimally on a quarterly basis, using *SU Periodic Inspection Controlled Substance Checklist (Form 7)*. Retain inspection records for at least one year.
10. Biennially, complete and submit to EH&S the physical inventory, as required by regulations and directed by the institutional program.
11. Prior to moving, contact SU Controlled Substances Program Office to seek approval for moving storage location of Controlled Substances.
12. Immediately report missing controlled substances to Environmental Health & Safety by calling 5-9999. EH&S will forward cases of suspected theft or diversion to Stanford's Department of Public Safety. Any imminent safety threats are to be reported to Public Safety @9-911.
13. Ensure any delegated duties associated with this program are conducted in a timely manner.

3.0 Authorized Researcher

Authorized Researchers are individuals (e.g., staff, graduate students, undergraduate students, post-docs, visiting scholars and co-faculty) who are assigned by the Participating Faculty/Senior Research Staff to work with controlled substances within their laboratory and who have submitted *SU Controlled Substance Authorized Researcher Application (Form 2)* to EH&S.

An **Authorized Researcher** is responsible for:

1. Complying with university, federal and state regulations pertaining to the possession of controlled substances via adherence to *Stanford University's Controlled Substances & Precursor Chemicals Program* regarding:
 - Authorization
 - Training
 - Security, receiving, storing, using, maintenance of usage log sheets, disposing of controlled substances
 - Separately maintain Schedule II controlled substance inventory and records from Schedule III-V controlled substances.
 - Reporting theft or loss of controlled substances.
2. If delegated by Participating Faculty/Senior Research Staff, participating in or conducting program activities such as maintaining on-line inventory, periodic inspections, biennial campus-wide inventory, etc.

STANFORD UNIVERSITY
Controlled Substances & Precursor Chemicals Program

CONTROLLED SUBSTANCES MANAGEMENT

Use Authorization & Purchasing

Any University faculty or senior research staff member needing to purchase Schedule II – V controlled substances for research under SU’s Institutional Registration must gain EH&S use/ purchasing approval.

1. For use/ purchasing approval, submit the following forms to EH&S:

- ***SU Controlled Substance Purchase Request Application (Form 1a)**** - Identifies the controlled substances requested, names of the authorized researchers, and provides proof of legitimate research use via approval from one of the following:
 - Administrative Panel for Laboratory Animal Care (APLAC) for animal research,
 - Institutional Review Board (IRB) for human subjects related research, or
 - the applicant’s department chairperson (if the applicant is the department chairperson or higher, approval must be obtained by the applicant’s supervisor).

NOTE: This process does not cover authorization requirements of the Research Advisory Panel of California (RAPC).

Faculty and senior research staff must independently seek authorization from the RAP C if their research projects specifically involve:

- Any Schedule I controlled substance;
- Human research using any Schedule I or Schedule II controlled substance; or
- Research for the treatment of drug abuse using any drug, scheduled or not.

Applications are available at <http://caag.state.ca.us/research/research.htm>.

* For Schedule II requests, submit a separate Form 1a because records for Schedule II Controlled Substances must be maintained separately from Schedule III- V.

- ***SU Controlled Substance Authorized Researcher Application (Form 2)*** - Fulfills the regulatory requirement to fairly assess the likelihood of personnel to commit a drug security breach. Authorization to access controlled substances will be denied to any personnel who has been convicted of a felony offense relating to controlled substances or who, at any time had an application for DEA registration denied or registration revoked—in accordance with Section 21 CFR 1301.90. Names of all new Authorized Researchers are made available to the U.S. Drug Enforcement Administration (for screening of criminal history).

The form also communicates the employees’/students’ responsibility to:

- obtain the requisite health and safety training on the hazards of working with the controlled substance from his/her supervisor
- follow listed work practices as further detailed in the User’s Guide & Written Program.

2. After receipt and approval of Form 1a and Form 2, EH&S will coordinate with the authorized researchers to conduct an inspection of the laboratory to verify that security, storage, training, recordkeeping requirements are met.

3. When re-ordering controlled substances within 2 years of the original use/ purchase approval, submit the ***SU Controlled Substance Re-ordering Request (Form 1b)*** to EH&S. When re-ordering controlled substances more than 2 years after the original purchase approval, re-submission of the ***SU Controlled Substances Purchase Request Application (Form 1a)*** is necessary.

STANFORD UNIVERSITY
Controlled Substances & Precursor Chemicals Program

After validating any purchase or re-ordering request, EH&S is to notify the requestor of approval/purchasing status and inform them of their Controlled Substance Authorization (CSA) Number for this order. EH&S then facilitates the requested controlled substance purchase using pre-selected vendors. If specific suppliers are identified by the requestor, EH&S will make all possible attempts to fulfill the request and follow-up if the request cannot be fulfilled. EH&S will then initiate a journal transfer to charge the department for the Controlled Substance.

STANFORD UNIVERSITY
Controlled Substances & Precursor Chemicals Program

CONTROLLED SUBSTANCES MANAGEMENT

Central Receiving & Dispensing Process

All authorized controlled substance purchases are delivered to the EH&S's Controlled Substances and Precursor Chemicals Program Office located on-campus at the Environmental Safety Facility- 480 Oak Road.

Once shipment is received, EH&S notifies the Faculty or Senior Research Staff Member or authorized designate that material can be picked up at EH&S. Only SU Controlled Substance Authorized Researchers with SU ID or other acceptable forms of picture ID will be allowed to pick up orders and sign the chain of custody statement. EH&S will maintain documentation of all approved distributions. Authorized Researchers must deliver the order directly to the approved storage location (per Program requirements—see Storage and Security) specifically listed on the submitted *SU Controlled Substance Purchase Request Application (Form 1a)*.

STANFORD UNIVERSITY
Controlled Substances & Precursor Chemicals Program

CONTROLLED SUBSTANCES MANAGEMENT

Inventory & Recordkeeping

Per the Code of Federal Regulations- Title 21, Section 1304, complete and accurate records shall be kept of all controlled substances purchased, manufactured, transferred, or wasted.

FOR RESEARCHERS: Controlled Substance Logbooks

Each authorized Faculty or Senior Research Staff Member must maintain an up-to-date usage log of each controlled substance in possession using the *SU Controlled Substances Usage Log (Form 3)*. Records must be kept locally for a minimum of two years from final disposition of the controlled substance. Logbooks shall be kept available for periodic audit by SU EH&S and the DEA.

FOR RESEARCHERS: Biennial Inventory Submission

On a periodic two-year institutional cycle, each Faculty or Senior Research Staff Member must submit a controlled substance inventory on a particular day in January to EH&S using the *SU Controlled Substances Biennial Inventory Form (Form 4)*. Submit a separate Form 4 for Schedule II controlled substance inventory.

FOR EH&S: Institutional Inventory Tracking

Upon initial registration with the DEA, EH&S has generated an initial campus-wide inventory of all reported stocks of controlled substance being covered under the University's institutional registration.

Every subsequent 2 years, the University shall inventory each substance during a one-day institutional inventory in which participating faculty and senior research staff must complete the *SU Controlled Substances Biennial Inventory Form (Form 4)*. From these records it must be possible to trace the flow of any drug from the vendor to the dispensing station (EH&S), to the end of use by the authorized research staff. Inventory records are to be maintained for at least two years from final disposition of the controlled substance.

STANFORD UNIVERSITY
Controlled Substances & Precursor Chemicals Program

CONTROLLED SUBSTANCES MANAGEMENT

Storage & Security

The University's overall security system involves a coordinated system of physical and administrative controls.

Public Safety: Stanford University's Department of Public Safety has officers who continuously patrol the University and enforce public safety and security.

Building Systems: Stanford University's buildings have card key or key systems to lock building after hours, with some facilities also having video cameras stationed at the entrances to buildings.

Storage: Controlled substances shall be stored in a securely locked, substantially constructed cabinet, located where access is limited. **EXCEPTION:** The following substances must be stored in a safe: Carfentanil, etorpine hydrochloride, and diprennorphine.

Access: Access within the laboratory must be limited to the smallest number of SU Controlled Substance Authorized Researchers necessary to perform related research activities to help assure complete accountability and reconciliation of any discrepancy that may result.

Screening of Authorized Researchers: All researchers intending to handle controlled substances, including faculty and senior research staff, are required to undergo background screening via submission of the *SU Controlled Substance Authorized Researcher Application (Form 2)*.

Work Practices: Controlled substances must never be left unattended at any time. Discovery of an unattended controlled substance, or an unsecured storage area, exposes the institution to losing its registration.

Containers/ Labeling: Controlled substances must not be transferred from the original containers for inventory purposes. Identifying labels must not be removed from the original containers. If the substance is converted or diluted, the new container must be labeled properly.

Loss or Theft: Any detected loss or theft of controlled substances must be reported immediately to Stanford University's EH&S Emergency Line @5-9999. If the material is stolen or diversion is suspected, EH&S will forward information to Stanford University's Department of Public Safety. If any imminent safety threat exists, personnel are to contact Public Safety directly at 9-911.

EH&S will submit the required loss/ theft reports directly to the DEA using DEA Form 106.

STANFORD UNIVERSITY
Controlled Substances & Precursor Chemicals Program

CONTROLLED SUBSTANCES MANAGEMENT

Transfers

Intra-Campus Transfers:

Ownership of controlled substances may only be transferred to an individual covered under the University's Program, and such transfer may only occur upon specific written approval granted by EH&S.

An intra-campus transfer of a controlled substance will be approved only if the following criteria are met:

1. The original inventory must have been acquired under the Stanford DEA registration.
2. The Faculty or Senior Research Staff Member receiving the substance(s) must submit a *SU Controlled Substance Purchase Request Application (Form 1a)* to EH&S and receive approval from EH&S for such transfer.
3. Both parties maintain documentation of any approved transfer.

Prohibition of Inter-Campus Transfers:

Under no circumstances can controlled substances falling under the institutional registration be transferred into or out of the University on the main campus. Faculty with dual appointments at Stanford University and the VAPAHCS are prohibited from taking or transferring controlled substances into or out of VAPAHCS laboratories. Also, faculty with on - and off - campus laboratories is prohibited from taking or transferring controlled substances into or out of on - campus laboratories.

STANFORD UNIVERSITY
Controlled Substances & Precursor Chemicals Program

CONTROLLED SUBSTANCES MANAGEMENT

Disposal

Controlled substances to be disposed must be properly accounted for, and are not allowed to be disintegrated, crushed into powder and dissolved in water for disposal. A request for waste pick up must be made to EH&S's Hazardous Waste Program by submitting the *SU Controlled Substances Disposal Request Form (Form 6)* via fax to x 5-3468.

Categories of Waste:

1. **Wasted Controlled Substances** - These include items such as unused tablets, injections, oral liquid or preparations compounded in error, which contain controlled substances.
2. **Expired Controlled Substances** - These include controlled substances, which have exceeded their shelf life, unwanted Controlled Substances classified as non-formulary drugs or a drug that has fallen into disuse.

Destruction of properly submitted controlled substances are managed by EH&S per the DEA's requirements: http://www.deadiversion.usdoj.gov/21cfr_reports/surrend/index.html

NOTE: EH&S only manages the disposal of DEA controlled substances (Schedule II-V) obtained under SU's institutional DEA registration; individual registrants are responsible for managing the disposal of their controlled substances per DEA requirements.

STANFORD UNIVERSITY
Controlled Substances & Precursor Chemicals Program

PRECURSOR CHEMICAL MANAGEMENT

The mission of the DEA's and the CA-DOJ's Precursor Chemicals Control Programs are to disrupt the illicit production of controlled substances by preventing diversion of chemicals used to make drugs. The illegal production of drugs such as methamphetamine, cocaine, heroin, and MDMA (ecstasy) requires enormous quantities of precursor and essential chemicals. These federal and state programs seek to minimize the regulatory burden on the legitimate chemical industry while instituting effective anti-diversion policies.

A DEA registration (or California Department of Justice registration) is required for purchasing precursor chemicals from vendors outside of California. If precursor chemicals are bought from a vendor within California, use of the registration is not required and the following procurement process does not apply. Note that when purchasing precursor chemicals from California-based vendors, a minimum 21 day processing period is required for such purchases to be completed.

Lists of regulated precursor chemicals are provided as follows:

- Appendix B - Federal Drug Enforcement Administration List I and II chemicals
- Appendix C - California's Department of Justice Precursor Chemical List

Approval and Purchase Process - Use of Institutional DEA Registration

Any University faculty or senior research staff member needing to purchase precursor chemicals for research from out-of-state vendors must submit the *SU Precursor Chemical Purchase Request Application (Form 5)* to EH&S to initiate the approval process.

After approving the Purchase Request Application, EH&S will place the order using pre-selected vendors. If specific suppliers are identified by the requestor, EH&S will make all possible attempts to fulfill the request and follow-up if the request cannot be fulfilled.

The shipment is delivered directly to EH&S, where the authorized researcher is notified that the package can be picked up. Precursor chemicals must be delivered to the research lab directly after pick-up. EH&S will then initiate a journal transfer to charge the department for the precursor chemical.

Appendix A: Schedules of Controlled Substances

The Federal [Drug Enforcement Administration \(DEA\)](#) lists controlled substances into 5 schedules. These drugs are listed in the Controlled Substance Act (CSA) of 1970. Examples of drugs in each schedule are listed below – this is not a complete listing, for drugs not listed please use the hyperlinks included.

Section 812 of the Controlled Substances Act ([21 U.S.C. §801](#) et seq.) (CSA) lists substances that were controlled in 1970 when the law was enacted. Since then, approximately 160 substances have been added, removed, or transferred from one schedule to another. The current official list of controlled substances can be found in [section 1308](#) of the most recent issue of [Title 21 Code of Federal Regulations \(CFR\) Part 1300](#) to end ([21 CFR §1308](#)) and the final rules which were published in the Federal Register subsequent to the issuance of the CFR.

This list describes the basic or parent chemical and do not describe the salts, isomers and salts of isomers, esters, ethers and derivatives which may be controlled substances. **These lists are intended as general references and are not comprehensive listings of all controlled substances.** Please note that a substance need not be listed as a controlled substance to be treated as a Schedule I or substance for criminal prosecution. A controlled substance analogue is a substance that is intended for human consumption and is structurally or pharmacologically substantially similar to or is represented as being similar to a Schedule I or Schedule II substance and is not an approved medication in the United States. (See [21 U.S.C. §802\(32\)\(A\)](#) for the definition of a controlled substance analogue and [21 U.S.C. §813](#) for the schedule.)

Lists of Controlled Substances

Alphabetical Order	By Schedule
A - B	Schedule I
C	Schedule II
D	Schedule III
E - F	Schedule IV
G - L	Schedule V
M	
N - O	
P	
Q - Z	

Appendix B: Federal DEA List I & II Chemicals (as of 9/4/09)

Congress passed the Chemical Diversion and Trafficking Act (CDTA) in 1988 and subsequent amendments in 1993, placing under control 34 chemicals. These laws provide a system of regulatory controls and criminal sanctions to address both domestic and international diversion of important chemicals without interrupting access to chemicals destined for legitimate commerce. The CDTA created two categories for the controlled chemicals, as follows:

List I Chemicals (per 21 CFR 1310.02(a)):

- (1) Anthranilic acid, its esters, and its salts
- (2) Benzyl cyanide
- (3) Ephedrine, its salts, optical isomers, and salts of optical isomers
- (4) Ergonovine and its salts
- (5) Ergotamine and its salts
- (6) N-Acetylanthranilic acid, its esters, and its salts
- (7) Norpseudoephedrine, its salts, optical isomers, and salts of optical isomers
- (8) Phenylacetic acid, its esters, and its salts
- (9) Phenylpropanolamine, its salts, optical isomers, and salts of optical isomers
- (10) Piperidine and its salts
- (11) Pseudoephedrine, its salts, optical isomers, and salts of optical isomers
- (12) 3,4-Methylenedioxyphenyl-2-propanone
- (13) Methylamine and its salts
- (14) Ethylamine and its salts
- (15) Propionic anhydride
- (16) Isosafrole
- (17) Safrole
- (18) Piperonal
- (19) N-Methylephedrine, its salts, optical isomers, and salts of optical isomers (N-Methylephedrine)
- (20) N-Methylpseudoephedrine, its salts, optical isomers, and salts of optical isomers
- (21) Hydriodic Acid
- (22) Benzaldehyde
- (23) Nitroethane
- (24) Gamma-Butyrolactone (Other names include: GBL; Dihydro-2 (3H)-furanone; 1,2-Butanolide; 1,4-Butanolide; 4-Hydroxybutanoic acid lactone; gamma-hydroxybutyric acid lactone)
- (25) Red Phosphorus
- (26) White phosphorus (Other names: Yellow Phosphorus)
- (27) Hypophosphorous acid and its salts (including ammonium hypophosphite, calcium hypophosphite, iron hypophosphite, potassium hypophosphite, manganese hypophosphite, magnesium hypophosphite, and sodium hypophosphite)
- (28) N-phenethyl-4-piperidone (NPP)
- (29) Iodine

List II Chemicals (per 21 CFR 1310.02(b)):

- 1) Acetic anhydride
- (2) Acetone
- (3) Benzyl chloride
- (4) Ethyl ether
- (5) Potassium permanganate
- (6) 2-Butanone (or Methyl Ethyl Ketone or MEK)
- (7) Toluene
- (8) Hydrochloric acid (including anhydrous hydrogen chloride)
- (9) Sulfuric acid
- (10) Methyl Isobutyl Ketone (MIBK)
- (11) Sodium Permanganate

Appendix C: List of California Department of Justice Precursor Chemicals (as of 9/4/09)

CA H&S Code 11100. (a) Any manufacturer, wholesaler, retailer, or other person or entity in this state that sells, transfers, or otherwise furnishes any of the following substances to any person or entity in this state or any other state shall submit a report to the Department of Justice of all of those transactions:

- (1) Phenyl-2-propanone.
- (2) Methylamine.
- (3) Ethylamine.
- (4) D-lysergic acid.
- (5) Ergotamine tartrate.
- (6) Diethyl malonate.
- (7) Malonic acid.
- (8) Ethyl malonate.
- (9) Barbituric acid.
- (10) Piperidine.
- (11) N-acetylanthranilic acid.
- (12) Pyrrolidine.
- (13) Phenylacetic acid.
- (14) Anthranilic acid.
- (15) Morpholine.
- (16) Ephedrine.
- (17) Pseudoephedrine.
- (18) Norpseudoephedrine.
- (19) Phenylpropanolamine.
- (20) Propionic anhydride.
- (21) Isosafrole.
- (22) Safrole.
- (23) Piperonal.
- (24) Thionylchloride.
- (25) Benzyl cyanide.
- (26) Ergonovine maleate.
- (27) N-methylephedrine.
- (28) N-ethylephedrine.
- (29) N-methylpseudoephedrine.
- (30) N-ethylpseudoephedrine.
- (31) Chloroephedrine.
- (32) Chloropseudoephedrine.
- (33) Hydriodic acid.
- (34) Gamma-butyrolactone, including butyrolactone; butyrolactone gamma; 4-butyrolactone; 2(3H)-furanone dihydro; dihydro-2(3H)-furanone; tetrahydro-2-furanone; 1,2-butanolide; 1,4-butanolide; 4-butanolide; gamma-hydroxybutyric acid lactone; 3-hydroxybutyric acid lactone and 4-hydroxybutanoic acid lactone with Chemical Abstract Service number (96-48-0).
- (35) 1,4-butanediol, including butanediol; butane-1,4-diol; 1,4-butylene glycol; butylene glycol; 1,4-dihydroxybutane; 1,4-tetramethylene glycol; tetramethylene glycol; tetramethylene 1,4-diol with Chemical Abstract Service number (110-63-4).
- (36) Red phosphorus, including white phosphorus, hypophosphorous acid and its salts, ammonium hypophosphite, calcium hypophosphite, iron hypophosphite, potassium hypophosphite, manganese hypophosphite, magnesium hypophosphite, sodium hypophosphite, and phosphorous acid and its salts.
- (37) Iodine or tincture of iodine.
- (38) Any of the substances listed by the Department of Justice in regulations promulgated pursuant to subdivision (b).