THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER

UT Health Science Center: HM5203 - Hazardous Waste Management Plan	
Version 3	**Publication Date: 03/07/2025**

Purpose

The purpose of this procedure is to comply with federal, state, and local regulations pertaining to the management of hazardous waste and to provide a framework for those individuals on campus who generate or handle hazardous waste.

Applicability

This shall apply to students, staff, and faculty at the University of Tennessee Health Science Center (UTHSC) Memphis campus.

Scope

This standard applies to hazardous waste generated at the UTHSC Memphis campus.

Abbreviations

DOT - Department of Transportation

HAZWOPER - Hazardous Waste Operations and Emergency Response Standard

IATA - International Air Transportation Agency

RCRA - Resource Conservation and Recovery Act

SAA - Satellite Accumulation Area

TDEC - Tennessee Department of Environment and Conservation

Definitions

Hazardous Waste - The EPA defines hazardous waste as a material that no longer has an intended value with properties that make it dangerous or potentially harmful to human health or the environment. Hazardous wastes can exist as liquids, solids, contained gases, or sludges. They can be the by-products of manufacturing processes or simply discarded commercial products, like cleaning fluids or pesticides.

In regulatory terms, a RCRA hazardous waste is either a listed waste that appears on one of the four hazardous wastes lists (F-list, K-list, P-list, or U-list), and/or exhibits at least one of four

characteristics – ignitability, corrosivity, reactivity, or toxicity. Hazardous waste is regulated under the Resource Conservation and Recovery Act (RCRA) Subtitle C, which is enforced by the EPA on a federal level, and TDEC on a state level.

Roles and Responsibilities

I. University Administration

The Chancellor of the University is responsible for the administration of policy pertaining to institutional safety and health-related matters. The chancellor oversees the administration of safety policies through the chain of authority within the institution, delegating to deans, department heads, principal investigators, and supervisors the responsibility for ensuring safe work practices of those under their supervision and adherence to established policy and guidelines.

II. Campus Safety and Emergency Management

Campus Safety and Emergency Management is responsible for the following:

- Monitor the implementation of the safety and health policies of the University.
- Design and improve disposal procedures for chemical waste materials.
- Prepare, submit, and maintain records, reports and manifests as required by government regulations.
- Prepare applications for state and federal permits to generate and properly dispose of hazardous chemical waste.
- Schedule and co-ordinate the activities of the hazardous waste contractors on campus.
- Ensure the university's compliance with all applicable federal (EPA) and state (TDEC) environmental regulations concerning hazardous waste.
- Ensure the university is making an effort to minimize the amount of hazardous waste generated on campus.
- Represent the university during EPA and TDEC regulatory inspections.

III. Principal Investigator, Classroom Instructor or Supervisor

The principal investigator, classroom instructor, or supervisor has the direct responsibility for ensuring that the policy and guidelines established herein are followed by all personnel, including other researchers, under their authority. This includes the completion of appropriate training by personnel under their oversight. The supervisors of individuals who generate hazardous waste are required under federal and state law to ensure these individuals have been trained and that training must be documented. Training is available from Campus Safety in the form of traditional classroom or online formats. Training must

be completed annually for individuals who generate and manage hazardous waste. For training information, refer to the safety website or 448-6114.

III. Laboratory Workers, Employees, Students, and Other Individuals

The success of the hazardous chemical waste management program at the University is dependent on the conscientious efforts of the individual laboratory worker and staff employee. The individual staff members are to:

- Manage and dispose of all chemical waste in accordance with established procedures set forth in this disposal policy.
- Maintain the identity of all chemicals with which they work.
- Package and label surplus and waste chemicals in accordance with established procedures set forth in this disposal policy.
- Seek the advice, when necessary, of Campus Safety and Emergency Management concerning the proper handling and disposal of hazardous chemicals.
- Ensure they are properly trained on hazardous waste management, and that this documented training is refreshed on an annual basis.

Procedures

I. Container Management

- Containers must be leak-proof and chemically compatible with their contents. Lids must fit properly so that the container is leak proof.
- When selecting a waste container, pay attention to the original container material to ensure waste added to the container is compatible with residues of the original material. Make sure empty containers once used to hold product are clean and do not contain any remaining product residue.
- Bags may be used only for dry solids. Needles (capped or uncapped), pipettes, broken glass, or other sharp-edged materials that are chemically contaminated are not acceptable in bags. All "sharps" must be placed in puncture-resistant containers.
- Containers which show signs of contamination on their exterior are not acceptable regardless of their contents.
- Containers and bags marked with biohazard or radioactive warnings are not acceptable for chemical waste disposal. If a waste has biological and/or radiological and chemical hazards, please contact Campus Safety for guidance before packaging.
- When adding hazardous waste to a container, only the constituents that are specifically listed on the waste label should be added and care must be taken not to mix incompatible materials.

- All containers must be closed with a tight-fitting lid unless waste is being added or removed from the container. It is illegal to store waste in an open container.

II. Labeling Requirements

To comply with state and federal regulations and University policy, the following information must appear on each container of hazardous waste.

- Hazardous waste state and federal regulations require that each container must be clearly marked with the words "Hazardous Waste" and an indication of the hazards of their contents (i.e., ignitable, corrosive, reactive, and/or toxic). Campus Safety requires that all hazardous waste must be labeled with a UTHSC hazardous waste label. Labels are accessible on the UTHSC webpage.
- Chemical Constituents: Write all constituents, whether hazardous or non-hazardous, on the waste label. Formulas, trade names, abbreviations, and general names and nomenclature are not acceptable. The proper chemical name must be written out in its entirety. Provide percentage of constituents, if known. Estimates are acceptable.

III. Storage Requirements

- Any container used for disposal and storage of waste must be marked with the information specified in the Labeling section upon placing the first drop of waste into the container.
- Whenever possible, store flammable waste liquids and waste corrosive liquids in cabinets designed for these materials.
- The maximum amount that can accumulate in the lab is 55 gallons of hazardous waste or 1 kilogram of acutely toxic waste (Appendix A). If you accumulate more than the maximum amount, the waste needs to be removed from the lab no later than 3 days after these maximum amounts are reached.
- All waste must be stored in secondary containment (i.e., cabinets and trays) and should be segregated according to hazard class (i.e., flammables, toxics, etc.).

IV. Disposal

Contact Campus Safety to coordinate a pickup at safety@uthsc.edu or 448-6115. Waste pickup requests can also be made using the EH&S Assistant. Waste must never be left unattended outside the labs. A Campus Safety representative must receive it.

V. General Requirements

- Hazardous waste must never be disposed of down the sanitary sewer, the storm sewer, placed in the regular trash, by evaporation (a container without a lid implies

evaporation for volatile substances), mixing with a biohazard, or mixing with a non-hazardous substance (i.e., dilution).

- The following items are not classified as hazardous waste and are not included in this policy:
  - sewage
  - regular trash
  - universal waste (fluorescent bulbs, batteries)
  - used oil
  - radioactive materials
  - biohazardous materials
- The burden of hazardous waste determination lies with the waste generator. If unsure whether a waste is hazardous, reviewing the safety data sheet (SDS) or original container labels are good starting points. When in doubt, assume the waste is hazardous and manage as a hazardous waste. Campus Safety should be consulted with questions concerning hazardous waste determinations.
- Effort must be made to minimize and reduce the volumes of hazardous waste generated on campus. Please refer to UTHSC Waste Reduction Plan for ideas on waste minimization.
- Empty containers of EPA P-list material (Appendix A) must be collected for disposal as hazardous waste unless triple-rinsed with a suitable solvent. The rinsate must be collected and handled as hazardous waste.

Training

The supervisors of individuals who generate hazardous waste are required under federal and state law to ensure these individuals have been trained and that training must be documented. Training is available from Campus Safety in the form of traditional classroom, or online formats. Training should be completed annually for individuals who generate and manage hazardous waste. For training information, refer to the Research Safety Affairs website or call 448-6114.

The Chief Safety Officer shall ensure that select staff members are adequately trained in the following subjects:

- Hazardous substances
- DOT shipping requirements
- Hazardous waste management (RCRA regulations)
- Personal protective equipment
- OSHA HAZWOPER

- Procedure for submitting the annual report to the Tennessee Department of Environment and Conservation

Recordkeeping

Campus Safety shall serve as the primary location for records related to hazardous waste. Records shall be maintained on the following:

- Hazardous waste manifests
- Annual reports
- Land disposal restrictions
- Waste stream profile
- Waste determinations
- Disposal certificates
- Waste Reduction Plan
- Emergency Contingency Plan and Quick Reference Guide
- Training:
    - DOT Hazardous Material Shipping
    - IATA Hazardous Materials Shipping
    - OSHA/RCRA Hazardous Waste Operations
- Communication from and to:
    - Regulatory agencies
    - Hazardous waste vendors
    - Generators of hazardous waste
    - University administration

Most of these records must be maintained for at least three years to meet regulatory requirements. Training records shall be maintained by the individual department to whom the employee or student reports.

Responsible Official and Additional Contacts

Subject Matter	Office Name	Telephone Number	Email/Web Address
Policy Clarification and Interpretation	Campus Safety and Emergency Management	901-448-6114	safety@uthsc.edu
Policy Training	Campus Safety and Emergency Management	901-448-6114	safety@uthsc.edu
Hazardous Waste Management Information	Campus Safety and Emergency Management	901-448-6114	safety@uthsc.edu

Related Policies and Associated Regulations

SA0400 – Hazardous Material Safety

OSHA 29 CFR 1910.120 (Hazardous Waste)

EPA 40 CFR 260-270 (Hazardous Waste)

Tennessee Department of Environment and Conservation Chapter 0400-12-01 (Hazardous Waste Program)

Appendices

Appendix A: List of Acutely Hazardous Substances (EPA P-list)

Appendix A:

List of Acutely Hazardous Chemicals and Waste Codes

Hazardous Waste No.	Chemical Abstracts No.	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicarb sulfone
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H3AsO4
P012	1327-53-3	Arsenic trioxide As2O3
P011	1303-28-2	Arsenic pentoxide As2O5
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-

P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate.
P188	57-64-7	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5-yl methylcarbamate ester (1:1)
P001	181-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3% (Warfarin)
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl] oxime
P021	592-01-8	Calcium cyanide Ca(CN)2
P189	55285-14-8	Carbamic acid, [(dibutylamino)- thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7-benzofuranyl ester
P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl-1H-pyrazol-3-yl ester.
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P127	1563-66-2	Carbofuran
P022	75-15-0	Carbon disulfide

P095	75-44-5	Carbonic dichloride
P189	55285-14-8	Carbosulfan
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p -Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide Cu(CN)
P202	64-00-6	m-Cumenyl methylcarbamate.
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa- chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8neta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)-

P051	172-20-8	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)-, & metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P191	644-64-4	Dimetilan
P047	1534-52-1	4,6-Dinitro-o-cresol, & salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O- [(methylamino)-carbonyl]oxime.
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin, & metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P194	23135-22-0	Ethanimidothioic acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester
P066	16752-77-5	Ethanimidothioic acid, N-[[(methylamino)carbonyl]oxy]-, methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur

P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P198	23422-53-9	Formetanate hydrochloride.
P197	17702-57-7	Formparanate.
P065	628-86-4	Fulminic acid, mercury(2+) salt
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid (Hydrogen cyanide)
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P192	119-38-0	Isolan
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate.
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese dimethyldithiocarbamate.
P092	62-38-4	Mercury, (acetato-O)phenyl-
P065	628-86-4	Mercury fulminate
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro-
P118	75-70-7	Methanethiol, trichloro-

P198	23422-53-9	Methanimidamide, N,N-dimethyl-N′-[3-[[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N′-[2-methyl-4-[[(methylamino)carbonyl]oxy]phenyl]-
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10- hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P199	2032-65-7	Methiocarb.
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyllactonitrile
P071	298-00-0	Methyl parathion
P190	1129-41-5	Metolcarb
P128	315-8-4	Mexacarbate
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl Ni(CO)4, (T-4)-
P074	557-19-7	Nickel cyanide Ni(CN)2
P075	154-11-5	Nicotine, & salts (does not include FDA-approved nicotine patches, gums, and lozenges)
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen dioxide NO2
P081	55-63-0	Nitroglycerine
P082	62-75-9	N-Nitrosodimethylamine

P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P194	23135-22-0	Oxamyl
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P048	51-28-5	Phenol, 2,4-dinitro-
P047	1534-52-1	Phenol, 2-methyl-4,6-dinitro-, & salts
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester

P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P204	57-47-6	Physostigmine
P188	57-64-7	Physostigmine salicylate.
P110	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide
P099	506-61-6	Potassium silver cyanide
P201	2631-37-0	Promecarb
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime.
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine

P075	154-11-5	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, & salts
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	157-24-9	Strychnine, & salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallium oxide Tl2O3
P114	12039-52-0	Thallium(I) selenite
P115	7446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide [(H2N)C(S)]2NH
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-

P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P185	26419-73-8	Tirpate
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium pentoxide V2O5
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	181-81-2	Warfarin, & salts, when present at concentrations greater than 0.3%
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-,
P121	557-21-1	Zinc cyanide
P122	1314-84-7	Zinc phosphide Zn3P2, when present at concentrations greater than 10%
P205	137-30-4	Ziram